



AGENDA

State Board of Education

November 19, 2021

STATE BOARD OF EDUCATION
(State Board for Career and Technology Education)

KEVEN ELLIS, Lufkin
Chair of the State Board of Education
District 9

PAM LITTLE, Fairview
Vice Chair of the State Board of Education
District 12

GEORGINA PÉREZ, El Paso
Secretary of the State Board of Education
District 1

Board Members

RUBEN CORTEZ, JR., Brownsville
District 2

AUDREY YOUNG, Apple Springs
District 8

MARISA PEREZ-DIAZ, Converse
District 3

TOM MAYNARD, Florence
District 10

LAWRENCE ALLEN, JR., Houston
District 4

PATRICIA HARDY, Fort Worth
District 11

REBECCA BELL-METEREAU
San Marcos, District 5

AICHA DAVIS, Dallas
District 13

WILL HICKMAN, Houston
District 6

SUE MELTON-MALONE, Robinson
District 14

MATT ROBINSON, Friendswood
District 7

JAY JOHNSON, Pampa
District 15

Committees of the State Board of Education
(updated January 26, 2021)

INSTRUCTION

Sue Melton-Malone, chair
Audrey Young, vice chair
Rebecca Bell-Metereau
Pam Little
Georgina Pérez

SCHOOL FINANCE/PERMANENT SCHOOL FUND

Tom Maynard, chair
Lawrence Allen, Jr., vice chair
Keven Ellis
Pat Hardy
Marisa Perez-Diaz

SCHOOL INITIATIVES

Matt Robinson, chair
Aicha Davis, vice chair
Ruben Cortez, Jr.
Will Hickman
Jay Johnson

November 16, 2021

State Board of Education
Austin, Texas

I certify that this is the official agenda of the State Board of Education for its meeting on November 16-19, 2021. Agenda items have been prepared and reviewed by Texas Education Agency staff and are presented for the board's discussion and consideration. Where appropriate, I have proposed an action.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mike Morath', with a long horizontal flourish extending to the right.

Mike Morath
Commissioner of Education

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SCHEDULE AND AGENDAS

Committees and Board
State Board of Education, Austin, Texas

Meeting Times November 16-19, 2021	
<u>Tuesday, November 16, 2021</u>	
1:00 p.m.	Committee of the Full Board (Room 1-104)
<u>Wednesday, November 17, 2021</u>	
9:00 a.m.	Committee of the Full Board (Room 1-104)
<u>Thursday, November 18, 2021</u>	
9:00 a.m.	Committee on Instruction (Room 1-100)
9:00 a.m.	Committee on School Finance/Permanent School Fund (Room 1-104)
9:00 a.m.	Committee on School Initiatives (Room 1-111)
<u>Friday, November 19, 2021</u>	
9:00 a.m.	General Meeting (Room 1-104)

If the Committee of the Full Board does not complete its agenda Tuesday, it will resume its meeting on Wednesday, Thursday, or Friday. If the Committee of the Full Board does not complete its agenda Wednesday, it will resume its meeting on Thursday or Friday. If the Committee on Instruction does not complete its meeting on Thursday, it will resume its meeting on Friday. If the Committee on School Finance/Permanent School Fund does not complete its agenda Thursday, it will resume its meeting on Friday. If the Committee on School Initiatives does not complete its agenda Thursday, it will resume its meeting on Friday.

NOTE: The chair may permit the board to take up and discuss any of the discussion items on a committee agenda, including hearing any invited presentations to a committee, based upon a recommendation from the committee or inability of the committee to complete its agenda on a preceding day.

The SBOE or a committee of the SBOE may conduct a closed meeting on any agenda item in accordance with Texas Open Meetings Act, Chapter 551, Subchapters D and E. Before any closed meeting is convened, the presiding officer will publicly identify the section or sections of the Act authorizing the closed meeting. All final votes, actions, or decisions will be taken in open meeting.

The agenda is online at <https://tea.texas.gov/sboe/agenda/> on the Texas Education Agency website. The posted information contains links to board action items including rule items and rule text, and selected discussion items. Public comments on proposed rules may be submitted electronically. All agenda items and rule text are subject to change at any time prior to each board meeting. To the extent possible, copies of changes made after the agenda and the schedule are published will be available at the board meeting.

TUESDAY
November 16, 2021

1:00 p.m.

COMMITTEE OF THE FULL BOARD – Room 1-104

Public testimony – Individual testimony will be taken at the time the related item comes up for committee discussion or action. The procedures for registering and taking public testimony at State Board of Education committee meetings and general board meetings are provided at <https://tea.texas.gov/about-tea/leadership/state-board-of-education/sboe-meetings/sboe-operating-rules> or in the information section of the agenda.

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| 1. Texas Higher Education Coordinating Board
Commissioner's Comments
(Board agenda page I-1) | COMMITTEE - DISCUSSION
SBOE - NO ACTION |
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This item provides an opportunity for the board to receive updates from the Commissioner of Higher Education on 60x30TX and other matters related to higher education in Texas.

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| 2. Report from the Commissioner of Education Regarding
Instructional Materials Offered for Adoption
under Proclamation 2022
(Board agenda page I-2) | COMMITTEE - ACTION
SBOE - ACTION |
|--|---|

This item provides the opportunity for the State Board of Education to adopt materials submitted for review in response to *Proclamation 2022*. The board issued *Proclamation 2022* in April 2020, calling for instructional materials for health and physical education. Products submitted in response to *Proclamation 2022* were reviewed in the summer of 2021. This item presents the final report from the commissioner of education regarding the coverage of the Texas Essential Knowledge and Skills, alleged factual errors, and information regarding whether a publisher on the list has previously refused to rebid instructional materials. Statutory authority is the Texas Education Code (TEC), §31.023 and §31.024.

COMMITTEE OF THE FULL BOARD (continued)

- 3. Implementation of Senate Bill (SB) 1232, 87th Legislature, Regular Session, 2021**
(Board agenda page I-4)

COMMITTEE - ACTION
SBOE - CONSENT

This item provides an opportunity for the State Board of Education (SBOE) to consider the approval of the creation of the Texas Permanent School Fund (PSF) Corporation and appointment of initial board members of the Texas PSF Corporation, provide initial approval of the Certificate of Formation, and address other matters related to the Texas PSF Corporation as outlined in SB 1232. Statutory authority is the Texas Constitution, Article VII, §2 and §5; Texas Education Code (TEC), §43.052(a) and §43.052(b); and SB 1232, 87th Legislature, Regular Session, 2021.

- 4. Consideration of Amendment to Texas Certificate of High School Equivalency Contract**
(Board agenda page I-5)

COMMITTEE - ACTION
SBOE - ACTION

This item provides the opportunity for the State Board of Education to consider an amendment to the current Texas Certificate of High School Equivalency Examination Provider contract requested by the vendor. Statutory authority is the Texas Education Code (TEC), §7.111.

- 5. Discussion of Proposed Amendments to 19 TAC Chapter 120, Other Texas Essential Knowledge and Skills, Subchapter A, Character Traits**
(Board agenda page I-7)

COMMITTEE - DISCUSSION
SBOE - NO ACTION

This item provides an opportunity for the committee to discuss proposed amendments to 19 Texas Administrative Code (TAC) Chapter 120, Other Texas Essential Knowledge and Skills, Subchapter A, Character Traits, §120.3, Texas Essential Knowledge and Skills for Positive Character Traits, Kindergarten-Grade 2, Adopted 2020; §120.5, Texas Essential Knowledge and Skills for Positive Character Traits, Grades 3-5, Adopted 2020; §120.7, Texas Essential Knowledge and Skills for Positive Character Traits, Grades 6-8, Adopted 2020; and §120.9, Texas Essential Knowledge and Skills for Positive Character Traits, Grades 9-12, Adopted 2020. The proposed amendments would update the standards for positive character traits to align with requirements of Senate Bill (SB) 123, 87th Texas Legislature, Regular Session, 2021. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4); 28.002(a) and (c); and 29.906, as amended by SB 123, 87th Texas Legislature, Regular Session, 2021.

**WEDNESDAY
November 17, 2021**

9:00 a.m.

COMMITTEE OF THE FULL BOARD – Room 1-104

Public testimony – Individual testimony will be taken at the time the related item comes up for committee discussion or action. The procedures for registering and taking public testimony at State Board of Education committee meetings and general board meetings are provided at <https://tea.texas.gov/about-tea/leadership/state-board-of-education/sboe-meetings/sboe-operating-rules> or in the information section of the agenda.

**1. Commissioner’s Comments
(Board agenda page I-9)**

**COMMITTEE - DISCUSSION
SBOE - NO ACTION**

This item provides an opportunity for the board to be briefed on current agenda items, agency operations, policy implementation, and public education-related legislation.

**2. Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §§112.1-112.7, and Subchapter B, Middle School, §§112.25-112.28
(Second Reading and Final Adoption)
(Board agenda page I-10)**

**COMMITTEE - ACTION
SBOE - ACTION**

This item presents for second reading and final adoption proposed new 19 Texas Administrative Code (TAC), Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021. The proposed new sections would update the standards to better align the content and ensure the standards remain current. Statutory authority is the Texas Education Code (TEC), §7.102(c)(4) and §28.002(a), (c), and (j).

COMMITTEE OF THE FULL BOARD (continued)

3. **Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training; Subchapter I, Health Science; Subchapter J, Hospitality and Tourism; Subchapter M, Law and Public Service; and Subchapter O, Science, Technology, Engineering, and Mathematics**
(Second Reading and Final Adoption)
(Board agenda page I-54)

COMMITTEE - ACTION
SBOE - ACTION

This item presents for second reading and final adoption proposed new 19 Texas Administrative Code (TAC) Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.416-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.651 and §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787. The proposed new rules would update the standards to ensure the standards remain current and better support the revised career and technical education (CTE) programs of study. Changes are recommended since approved for first reading. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2), and (b-17).

COMMITTEE OF THE FULL BOARD (continued)

4. **Proposed Repeal of 19 TAC Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, §§130.161-130.166; Subchapter G, §§130.201-130.211; Subchapter H, §§130.221-130.234; Subchapter I, §§130.251-130.263; Subchapter L, §§130.331-130.343; Subchapter O, §§130.401-130.435; and Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, §§127.309-127.314; Subchapter I, §§127.402-127.415; Subchapter J, §§127.468-127.480; Subchapter M, §§127.625-127.648; and Subchapter O, §§127.742-127.776**
(First Reading and Filing Authorization)
(Board agenda page I-189)

COMMITTEE - ACTION
SBOE - ACTION

This item presents for first reading and filing authorization the proposed repeal of 19 Texas Administrative Code (TAC) Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, Education and Training, §§130.161-130.166; Subchapter G, Government and Public Administration, §§130.201-130.211; Subchapter H, Health Science, §§130.221-130.234; Subchapter I, Hospitality and Tourism, §§130.251-130.263; Subchapter L, Law, Public Safety, Corrections, and Security, §§130.331-130.343; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§130.401-130.435; and proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.309-127.314; Subchapter I, Health Science, §§127.402-127.415; Subchapter J, Hospitality and Tourism, §§127.468-127.480; Subchapter M, Law and Public Service, §§127.625-127.648 ; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.742-127.776. The proposed rule actions would repeal Texas Essential Knowledge and Skills (TEKS) for career and technical education (CTE) in subchapters that are being revised and move the TEKS for existing CTE courses in these subchapters to 19 TAC Chapter 127 in order to keep all the TEKS for revised subchapters together in administrative rule and avoid confusion. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2), and (b-17).

COMMITTEE OF THE FULL BOARD (continued)

5. **Discussion of Proposed Amendments to 19 TAC Chapter 74, Curriculum Requirements, Subchapter B, Graduation Requirements**
(Board agenda page I-193)

**COMMITTEE - DISCUSSION
SBOE - NO ACTION**

This item provides an opportunity for the committee to discuss proposed amendments to 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements, Subchapter B, Graduation Requirements. The proposed amendments would update the high school graduation requirements to align with Senate Bill (SB) 369 and 1063, 87th Texas Legislature, Regular Session, 2021; update course titles; add new courses to satisfy specific graduation requirements; and make technical edits. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4); 28.025(a), (b-1), as amended by SB 1063, 87th Texas Legislature, Regular Session, 2021, (b-3), (b-14), (b-17), (c), (c-1), and (c-2); and 28.0256(a) and (b) and (d), as amended by SB 369, 87th Texas Legislature, Regular Session, 2021.

6. **Update on Texas Essential Knowledge and Skills (TEKS) Review**
(Board agenda page I-213)

**COMMITTEE - ACTION
SBOE - ACTION**

This item provides the opportunity for staff to present an update on the review of the Texas Essential Knowledge and Skills (TEKS) and the English Language Proficiency Standards (ELPS) and for the board to provide additional guidance to TEKS and ELPS review work groups, as necessary. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4), 28.002(a) and (c), and 28.025(a).

COMMITTEE OF THE FULL BOARD (continued)

**7. Discussion on Pending Litigation
(Board agenda page I-216)**

**COMMITTEE - DISCUSSION
SBOE - NO ACTION**

The State Board of Education may enter into executive session in accordance with the Texas Government Code, §551.071(1)(A), to discuss pending and contemplated litigation with the general counsel, legal staff, and, if necessary, attorney(s) from the Attorney General's Office. The Committee of the Full Board will meet in Room 1-103 to discuss this item.

Cases to be discussed may include:

Tribune Company, No. 08-13141; *The Official Committee of Unsecured Creditors of Tribune Company v. Fitzsimmons, Adv. Pro.* No. 10-54010 (*Bankr. D. Del.*); *Deutsche Bank v Bank of America*, No. 3:11-CV-01175-F (*N. D. Tex., Dallas Div.*) and *Deutsche Bank v. Employees Retirement Fund of the City of Dallas*, No. 3:11-CV-1167-F; (*N. D. Tex. Dallas Div.*) *CONSOLIDATED in: In re: Tribune Company Fraudulent Conveyance Litigation*; No. 11-MD-2296 *Consolidated Multidistrict Action (S.D.N.Y.)*;

Student v. Conroe ISD, Texas Education Agency and State Board of Education, No. 230-SE-0721
(Special Education Hearing Officer – State of Texas);
and

any other litigation arising after the date of posting or reasonably contemplated as of the date of the board meeting.

THURSDAY
November 18, 2021

9:00 a.m.

COMMITTEE ON INSTRUCTION – Room 1-100

Members: Sue Melton-Malone, chair; Audrey Young, vice chair; Rebecca Bell-Metereau; Pam Little; and Georgina C. Pérez. A quorum of the State Board of Education may attend the committee meeting and discuss items on the committee agenda.

Public testimony – Individual testimony will be taken at the time the related item comes up for committee discussion or action. The procedures for registering and taking public testimony at State Board of Education committee meetings and general board meetings are provided at <https://tea.texas.gov/about-tea/leadership/state-board-of-education/sboe-meetings/sboe-operating-rules> or in the information section of the agenda.

- 1. Proposed Repeal of 19 TAC Chapter 74, Curriculum Requirements, Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002, and Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005 (First Reading and Filing Authorization) (Board agenda page II-1)**

COMMITTEE - ACTION
SBOE - CONSENT

This item presents for first reading and filing authorization the proposed repeal of 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements, Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002, and Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005. The proposed repeals would remove high school graduation requirements that are outdated and no longer necessary. Statutory authority is the Texas Education Code (TEC), §7.102(c)(4) and §28.025.

COMMITTEE ON INSTRUCTION (continued)

2. Adoption of Review of 19 TAC Chapter 74, Curriculum Requirements
(Board agenda page II-4)

**COMMITTEE - ACTION
SBOE - CONSENT**

Texas Government Code (TGC), §2001.039, establishes a four-year rule review cycle for all state agency rules, including State Board of Education (SBOE) rules. This item presents the review of 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements. The rules being reviewed provide for curriculum requirements for school districts and include other provisions that relate to curriculum requirements. Statutory authority for this action is the TGC, §2001.039. The statutory authority for 19 TAC Chapter 74, Subchapters A-G, is Texas Education Code (TEC), §§7.102; 25.007; 28.002, as amended by House Bill (HB) 4509, 87th Texas Legislature, Regular Session, 2021 and Senate Bill (SB) 3, 87th Texas Legislature, Second Called Session, 2021; 28.0023; 28.008; 28.011 as amended by HB 2681, 87th Texas Legislature, Regular Session, 2021; 28.012; 28.014; 28.018; 28.023; 28.025, as amended by HB 1603 and SB 1063, 87th Texas Legislature, Regular Session, 2021; 28.0256, as amended by SB 369, 87th Texas Legislature, Regular Session, 2021; 28.053; 29.907; 33.081; and 38.003.

3. Approval of Updates and Substitutions to Adopted Instructional Materials
(Board agenda page II-10)

**COMMITTEE - ACTION
SBOE - CONSENT**

This item provides the opportunity for the committee to approve update and/or substitution requests received since the last board meeting. The updated content has been reviewed by subject-area specialists and determined to address the pertinent student expectations in a manner equal to the content initially reviewed and approved by the state review panel. Statutory authority is the Texas Education Code (TEC), §31.003 and §31.022.

4. Proposed Approval of Innovative Courses
(Board agenda page II-12)

**COMMITTEE - ACTION
SBOE - ACTION**

This item recommends approval of innovative courses that do not fall within any of the subject areas of the foundation or enrichment curriculum. Statutory authority is the Texas Education Code (TEC), §28.002(f).

**THURSDAY
November 18, 2021**

9:00 a.m.

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND – Room 1-104

Members: Tom Maynard, chair; Lawrence A. Allen, Jr., vice chair; Keven Ellis; Patricia Hardy; Marisa Perez-Diaz. A quorum of the State Board of Education may attend the committee meeting and discuss items on the committee agenda. A quorum of the Committee of Investment Advisors to the Permanent School Fund may attend the committee meeting and discuss items on the committee agenda.

Public testimony – Individual testimony will be taken at the time the related item comes up for committee discussion or action. The procedures for registering and taking public testimony at State Board of Education committee meetings and general board meetings are provided at <https://tea.texas.gov/about-tea/leadership/state-board-of-education/sboe-meetings/sboe-operating-rules> or in the information section of the agenda.

- 1. Approval of Costs to Administer the 2021–2022 State-Developed Assessments to Private School Students
(Board agenda page III-1)**

**COMMITTEE - ACTION
SBOE - CONSENT**

Texas Education Code, §39.033, allows a private school to voluntarily assess its students with the State of Texas Assessments of Academic Readiness (STAAR) and the Texas English Language Proficiency Assessment System (TELPAS) assessments. The State Board of Education must approve the per-student cost to private schools, which may not exceed the cost of administering the same assessment to a student enrolled in a public-school district. This item requests approval of these costs for the 2021–2022 school year. Statutory authority is the Texas Education Code (TEC), §39.033.

- 2. Review of Permanent School Fund Securities Transactions and the Investment Portfolio
(Board agenda page III-5)**

**COMMITTEE - DISCUSSION
SBOE - NO ACTION**

Investment staff will report on the transactions executed during the months of July, August, and September 2021 in the investment portfolio of the Texas Permanent School Fund. Statutory authority is the Texas Constitution, Article VII, §2 and §5; and 19 Texas Administrative Code (TAC), Chapter 33.

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND (continued)

- 3. Ratification of the Purchases and Sales of the Investment Portfolio of the Permanent School Fund for the Months of July, August, and September 2021**
(Board agenda page III-6)

COMMITTEE - ACTION
SBOE - CONSENT

This item provides an opportunity for the committee and board to consider approval of the purchases and sales of investments executed in the portfolio of the Permanent School Fund for the months of July, August, and September 2021. Statutory authority is the Texas Constitution, Article VII, §2 and §5; and 19 Texas Administrative Code (TAC), Chapter 33.

- 4. Report on Permanent School Fund Liquid Account and Ratification of Purchases and Sales for the Months of July, August, and September 2021**
(Board agenda page III-7)

COMMITTEE - ACTION
SBOE - CONSENT

This item provides an opportunity for the committee and board to receive a status update report on the liquid account and consider approval of the purchases and sales of investments executed in the liquid account for the months of July, August, and September 2021. Statutory authority is the Texas Constitution, Article VII, §2 and §5; Texas Natural Resources Code (NRC), §51.414, as repealed by SB 1232, 87th Legislature, Regular Session, 2021; and 19 Texas Administrative Code (TAC) Chapter 33.

- 5. Review of the Permanent School Fund Liquid Account Strategic Asset Allocation**
(Board agenda page III-8)

COMMITTEE - ACTION
SBOE - CONSENT

This item provides an opportunity for the committee and board to review the Permanent School Fund liquid account strategic asset allocation. Statutory authority is the Texas Constitution, Article VII, §2 and §5; Texas Natural Resources Code (NRC), §51.414, as repealed by SB 1232, 87th Legislature, Regular Session, 2021; and 19 Texas Administrative Code (TAC) Chapter 33.

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND (continued)

- 6. Overview of the Permanent School Fund Investment Portfolio** **COMMITTEE - DISCUSSION**
(Board agenda page III-9) **SBOE - NO ACTION**

This item provides an opportunity for the committee to receive an overview of the Permanent School Fund investment portfolio. Statutory authority is the Texas Constitution, Article VII, §5 and §2; and 19 Texas Administrative Code (TAC), Chapter 33.

- 7. Review of the Absolute Return Asset Class for the Permanent School Fund** **COMMITTEE - ACTION**
(Board agenda page III-10) **SBOE - CONSENT**

This item provides an opportunity for the committee and board to review the absolute return asset class. Statutory authority is the Texas Constitution, Article VII, §5 and §2; and 19 Texas Administrative Code (TAC), Chapter 33.

- 8. Proposed New 19 TAC Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation** **COMMITTEE - ACTION**
(First Reading and Filing Authorization) **SBOE - CONSENT**
(Board agenda page III-11)

This item presents for first reading and filing authorization proposed new 19 Texas Administrative Code (TAC) Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation. The proposed new section would address the term length of State Board of Education (SBOE) members on the board of directors of the Texas Permanent School Fund (PSF) Corporation as required by Senate Bill (SB) 1232, 87th Texas Legislature, Regular Session, 2021. Statutory authority is the Texas Constitution, Article VII, §5(a) and (f), and Texas Education Code (TEC), §43.001 and §43.053, as added by SB 1232, 87th Legislature, Regular Session, 2021.

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND (continued)

**9. Report of the Permanent School Fund Executive Administrator and Chief Investment Officer
(Board agenda page III-15)**

**COMMITTEE - DISCUSSION
SBOE - NO ACTION**

The Permanent School Fund executive administrator will report to the committee on matters relating to the management of the Permanent School Fund and the Charter District Reserve Fund. The report may present information on historical and current status of Fund holdings, current and proposed investment and operational policies and procedures, and historical and current Fund performance and compliance. The administrator may update the board on the bond guarantee program, the status of requests for proposal or for qualifications and current contracts for services and other administrative activities undertaken on behalf of the board. The administrator may provide an update on the PSF distribution or on the effect of legislation impacting the PSF. The administrator may provide an analysis of current and future investment market conditions, focusing upon the impact on the holdings of the Permanent School Fund. Statutory authority is the Texas Constitution, Article VII, §2 and §5; and 19 Texas Administrative Code (TAC), Chapter 33.

THURSDAY
November 18, 2021

9:00 a.m.

COMMITTEE ON SCHOOL INITIATIVES – Room 1-111

Members: Matt Robinson, chair; Aicha Davis, vice chair; Ruben Cortez, Jr; Will Hickman; Jay Johnson. A quorum of the State Board of Education may attend the committee meeting and discuss items on the committee agenda.

Public testimony – Individual testimony will be taken at the time the related item comes up for committee discussion or action. The procedures for registering and taking public testimony at State Board of Education committee meetings and general board meetings are provided at <https://tea.texas.gov/about-tea/leadership/state-board-of-education/sboe-meetings/sboe-operating-rules> or in the information section of the agenda.

- 1. Recommendation for Reappointments to the Fort Sam Houston Independent School District Board of Trustees
(Board agenda page IV-1)**

COMMITTEE - ACTION
SBOE - CONSENT

This item provides an opportunity for the board to consider three reappointments to the board of trustees of Fort Sam Houston Independent School District (ISD). The reappointments are necessary due to the expiration of the terms of office of three board members. Statutory authority is the Texas Education Code (TEC), §11.352, and Texas Administrative Code (TAC) 61.2.

- 2. Approval of Applicability of State Statute to Special Purpose School Districts
(Board agenda page IV-13)**

COMMITTEE - ACTION
SBOE - CONSENT

This item provides an opportunity for the committee and board to consider and approve an updated list by section of the Texas Education Code (TEC), Title I and Title II, and recommendations regarding which sections of the code should apply or not apply to the operations of Texas Tech University K-12 and The University of Texas at Austin High School. Statutory authority is the Texas Education Code (TEC), §11.351.

COMMITTEE ON SCHOOL INITIATIVES (continued)

- 3. Approval of Required School Safety Training for District Trustees**
(Board agenda page IV-14)

COMMITTEE - ACTION
SBOE - ACTION

House Bill 690, passed by the 87th Texas Legislature, Regular Session, 2021, requires the State Board of Education (SBOE) to require a trustee to complete training on school safety. The SBOE, in coordination with the Texas School Safety Center, must develop the curriculum and materials for the training. This item provides an opportunity for the board to approve the school safety training curriculum developed by the Texas School Safety Center. Statutory authority is the Texas Education Code (TEC), §11.159(b-1), as amended by HB 690, 87th Texas Legislature, Regular Session, 2021.

- 4. Discussion of Proposed Amendment to 19 TAC Chapter 61, School Districts, Subchapter A, Board of Trustees Relationship**
(Board agenda page IV-15)

COMMITTEE - DISCUSSION
SBOE - NO ACTION

This item provides an opportunity for the committee to discuss a proposed amendment to 19 Texas Administrative Code (TAC) Chapter 61, School Districts, Subchapter A, Board of Trustees Relationship. The proposed amendment would reflect changes made by House Bill (HB) 690, 87th Texas Legislature, Regular Session, 2021, to the State Board of Education's (SBOE's) duty to provide training courses for independent school district trustees. Statutory authority is the Texas Education Code (TEC), §11.159(b-1), as added by HB 690, 87th Texas Legislature, Regular Session, 2021.

COMMITTEE ON SCHOOL INITIATIVES (continued)

5. **Review of Proposed Amendments to 19 TAC Chapter 229, Accountability System for Educator Preparation Programs**
(Board agenda page IV-16)

**COMMITTEE - ACTION
SBOE - ACTION**

This item provides the State Board of Education (SBOE) an opportunity to review the State Board for Educator Certification (SBEC) rule actions that would propose amendments to 19 Texas Administrative Code (TAC) Chapter 229, Accountability System for Educator Preparation Programs. Chapter 229 establishes the performance standards and procedures for educator preparation program (EPP) accountability. The proposed amendments would provide for adjustments to the 2020–2021 *Accountability System for Educator Preparation (ASEP) Manual* due to the ongoing public health situation; implement House Bill (HB) 159, 87th Texas Legislature, Regular Session, 2021, to add students with disabilities to the student achievement ASEP performance indicator regarding student performance; provide additional clarity for certificate category calculations; and provide updates to the *ASEP Manual*. The statutory authority for 19 TAC Chapter 229 is the Texas Education Code (TEC), §§21.041(a), (b)(1), and (d); 21.043(b) and (c), 21.0441(c) and (d); 21.0443; 21.045, as amended by HB 159, 87th Texas Legislature, Regular Session, 2021; 21.0451; and 21.0452.

6. **Open-Enrollment Charter School Generation 27 Application Updates**
(Board agenda page IV-71)

**COMMITTEE - DISCUSSION
SBOE - NO ACTION**

The director of the Division of Charter School Authorizing and Administration will discuss updates regarding the Generation 27 Open-Enrollment Charter Application cycle. Statutory authority is the Texas Education Code (TEC), §12.101.

Information Materials

1. **State Board of Education Operating Rules (amended January 26, 2021)**
Public testimony information begins on page V-8.
(Board agenda page V-1)

2. **Current Status of the Permanent School Fund**
(Board agenda page V-26)

3. **2021-2025 Rule Review Plan for State Board of Education Rules**
(Board agenda page V-27)

This item outlines the rule review plan for State Board of Education (SBOE) rules during the period of September 2021 through August 2025. Texas Government Code (TGC), §2001.039, requires an ongoing four-year rule review of existing state agency rules, including SBOE rules. The rule review requirement in TGC, §2001.039, is designed to ensure that the reason for initially adopting or readopting a rule continues to exist.

OFFICIAL AGENDA

**STATE BOARD OF EDUCATION
AUSTIN, TEXAS**

**November 19, 2021
9:00 a.m.**

**William B. Travis Building, Room 1-104
1701 N. Congress Avenue**

Student Performance

Invocation

Pledge of Allegiance

Roll Call

Approval of Minutes

State Board of Education, September 3, 2021

1. Resolution and Presentations

Resolution honoring the 2021 *Presidential Awards for Excellence in Mathematics and Science Teaching* (PAEMST) state finalists

2021 Texas Secondary Teacher of the Year, Anthony Lopez-Waste

2021 Texas Elementary Teacher of the Year, Eric Hale

Portrait unveiling for former Commissioner of Education Michael L. Williams

Public testimony – Individual testimony will be taken at the time the related item comes up for Committee discussion or action. The procedures for registering and taking public testimony at State Board of Education committee meetings and general board meetings are provided at <https://tea.texas.gov/about-tea/leadership/state-board-of-education/sboe-meetings/sboe-operating-rules> or in the information section of the agenda.

2. Approval of Consent Agenda

Any agenda item may be placed on the Consent Agenda by any State Board of Education committee.

(Agenda Exhibit) 24

COMMITTEE OF THE FULL BOARD

3. Report from the Commissioner of Education Regarding Instructional Materials Offered for Adoption under *Proclamation 2022*

This item provides the opportunity for the State Board of Education to adopt materials submitted for review in response to *Proclamation 2022*. The board issued *Proclamation 2022* in April 2020, calling for instructional materials for health and physical education. Products submitted in response to *Proclamation 2022* were reviewed in the summer of 2021. This item presents the final report from the commissioner of education regarding the coverage of the Texas Essential Knowledge and Skills, alleged factual errors, and information regarding whether a publisher on the list has previously refused to rebid instructional materials. Statutory authority is the Texas Education Code (TEC), §31.023 and §31.024.

(Agenda Exhibit) I-2

4. Consideration of Amendment to Texas Certificate of High School Equivalency Contract

This item provides the opportunity for the State Board of Education to consider an amendment to the current Texas Certificate of High School Equivalency Examination Provider contract requested by the vendor. Statutory authority is the Texas Education Code (TEC), §7.111.

(Agenda Exhibit) I-5

5. Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training; Subchapter I, Health Science; Subchapter J, Hospitality and Tourism; Subchapter M, Law and Public Service; and Subchapter O, Science, Technology, Engineering, and Mathematics (Second Reading and Final Adoption)

This item presents for second reading and final adoption proposed new 19 Texas Administrative Code (TAC) Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.416-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.651 and §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787. The proposed new rules would update the standards to ensure the standards remain current and better support the revised career and technical education (CTE) programs of study. Changes are recommended since approved for first reading. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2), and (b-17).

(Agenda Exhibit) I-54

COMMITTEE OF THE FULL BOARD

- 6. **Proposed Repeal of 19 TAC Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, §§130.161-130.166; Subchapter G, §§130.201-130.211; Subchapter H, §§130.221-130.234; Subchapter I, §§130.251-130.263; Subchapter L, §§130.331-130.343; Subchapter O, §§130.401-130.435; and Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, §§127.309-127.314; Subchapter I, §§127.402-127.415; Subchapter J, §§127.468-127.480; Subchapter M, §§127.625-127.648; and Subchapter O, §§127.742-127.776
(First Reading and Filing Authorization)**

This item presents for first reading and filing authorization the proposed repeal of 19 Texas Administrative Code (TAC) Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, Education and Training, §§130.161-130.166; Subchapter G, Government and Public Administration, §§130.201-130.211; Subchapter H, Health Science, §§130.221-130.234; Subchapter I, Hospitality and Tourism, §§130.251-130.263; Subchapter L, Law, Public Safety, Corrections, and Security, §§130.331-130.343; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§130.401-130.435; and proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.309-127.314; Subchapter I, Health Science, §§127.402-127.415; Subchapter J, Hospitality and Tourism, §§127.468-127.480; Subchapter M, Law and Public Service, §§127.625-127.648 ; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.742-127.776. The proposed rule actions would repeal Texas Essential Knowledge and Skills (TEKS) for career and technical education (CTE) in subchapters that are being revised and move the TEKS for existing CTE courses in these subchapters to 19 TAC Chapter 127 in order to keep all the TEKS for revised subchapters together in administrative rule and avoid confusion. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2), and (b-17).

(Agenda Exhibit) I-189

- 7. **Update on Texas Essential Knowledge and Skills (TEKS) Review**

This item provides the opportunity for staff to present an update on the review of the Texas Essential Knowledge and Skills (TEKS) and the English Language Proficiency Standards (ELPS) and for the board to provide additional guidance to TEKS and ELPS review work groups, as necessary. Statutory authority is the Texas Education Code (TEC), §§7.102(c)(4), 28.002(a) and (c), and 28.025(a).

(Agenda Exhibit) I-213

COMMITTEE ON INSTRUCTION

- 8. **Proposed Approval of Innovative Courses**

This item recommends approval of innovative courses that do not fall within any of the subject areas of the foundation or enrichment curriculum. Statutory authority is the Texas Education Code (TEC), §28.002(f).

(Agenda Exhibit) II-12

COMMITTEE ON SCHOOL INITIATIVES

9. Approval of Required School Safety Training for District Trustees

House Bill 690, passed by the 87th Texas Legislature, Regular Session, 2021, requires the State Board of Education (SBOE) to require a trustee to complete training on school safety. The SBOE, in coordination with the Texas School Safety Center, must develop the curriculum and materials for the training. This item provides an opportunity for the board to approve the school safety training curriculum developed by the Texas School Safety Center. Statutory authority is the Texas Education Code (TEC), §11.159(b-1), as amended by HB 690, 87th Texas Legislature, Regular Session, 2021.

(Agenda Exhibit) IV-14

10. Review of Proposed Amendments to 19 TAC Chapter 229, Accountability System for Educator Preparation Programs

This item provides the State Board of Education (SBOE) an opportunity to review the State Board for Educator Certification (SBEC) rule actions that would propose amendments to 19 Texas Administrative Code (TAC) Chapter 229, Accountability System for Educator Preparation Programs. Chapter 229 establishes the performance standards and procedures for educator preparation program (EPP) accountability. The proposed amendments would provide for adjustments to the 2020–2021 *Accountability System for Educator Preparation (ASEP) Manual* due to the ongoing public health situation; implement House Bill (HB) 159, 87th Texas Legislature, Regular Session, 2021, to add students with disabilities to the student achievement ASEP performance indicator regarding student performance; provide additional clarity for certificate category calculations; and provide updates to the *ASEP Manual*. The statutory authority for 19 TAC Chapter 229 is the Texas Education Code (TEC), §§21.041(a), (b)(1), and (d); 21.043(b) and (c), 21.0441(c) and (d); 21.0443; 21.045, as amended by HB 159, 87th Texas Legislature, Regular Session, 2021; 21.0451; and 21.0452.

(Agenda Exhibit) IV-16

REPORTS OF COMMITTEES REGARDING AGENDA ITEMS POSTED FOR DISCUSSION ON COMMITTEE AGENDAS

Committee chairs may provide an update about discussion items considered during the current meeting by any standing committee or ad hoc committee.

REPORTS OF OTHER STATE BOARD OF EDUCATION MEMBERS REGARDING AGENDA ITEMS AND EDUCATIONAL ACTIVITIES AND CONCERNS IN INDIVIDUAL DISTRICTS

Members of the State Board of Education may present information regarding agenda items or other relevant information about public education.

Information Materials

1. **State Board of Education Operating Rules (amended January 26, 2021)**
Public testimony information begins on page V-8.
(Board agenda page V-1)

2. **Current Status of the Permanent School Fund**
(Board agenda page V-26)

3. **2021-2025 Rule Review Plan for State Board of Education Rules**
(Board agenda page V-27)

This item outlines the rule review plan for State Board of Education (SBOE) rules during the period of September 2021 through August 2025. Texas Government Code (TGC), §2001.039, requires an ongoing four-year rule review of existing state agency rules, including SBOE rules. The rule review requirement in TGC, §2001.039, is designed to ensure that the reason for initially adopting or readopting a rule continues to exist.

**CONSENT AGENDA
STATE BOARD OF EDUCATION
November 19, 2021**

(1) Implementation of Senate Bill (SB) 1232, 87th Legislature, Regular Session, 2021

This item provides an opportunity for the State Board of Education (SBOE) to consider the approval of the creation of the Texas Permanent School Fund (PSF) Corporation and appointment of initial board members of the Texas PSF Corporation, provide initial approval of the Certificate of Formation, and address other matters related to the Texas PSF Corporation as outlined in SB 1232. Statutory authority is the Texas Constitution, Article VII, §2 and §5; Texas Education Code (TEC), §43.052(a) and §43.052(b); and SB 1232, 87th Legislature, Regular Session, 2021.

(Agenda Exhibit) I-4

(2) Proposed Repeal of 19 TAC Chapter 74, Curriculum Requirements, Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002, and Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005 (First Reading and Filing Authorization)

This item presents for first reading and filing authorization the proposed repeal of 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements, Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002, and Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005. The proposed repeals would remove high school graduation requirements that are outdated and no longer necessary. Statutory authority is the Texas Education Code (TEC), §7.102(c)(4) and §28.025.

(Agenda Exhibit) II-1

(3) Adoption of Review of 19 TAC Chapter 74, Curriculum Requirements

Texas Government Code (TGC), §2001.039, establishes a four-year rule review cycle for all state agency rules, including State Board of Education (SBOE) rules. This item presents the review of 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements. The rules being reviewed provide for curriculum requirements for school districts and include other provisions that relate to curriculum requirements. Statutory authority for this action is the TGC, §2001.039. The statutory authority for 19 TAC Chapter 74, Subchapters A-G, is Texas Education Code (TEC), §§7.102; 25.007; 28.002, as amended by House Bill (HB) 4509, 87th Texas Legislature, Regular Session, 2021 and Senate Bill (SB) 3, 87th Texas Legislature, Second Called Session, 2021; 28.0023; 28.008; 28.011 as amended by HB 2681, 87th Texas Legislature, Regular Session, 2021; 28.012; 28.014; 28.018; 28.023; 28.025, as amended by HB 1603 and SB 1063, 87th Texas Legislature, Regular Session, 2021; 28.0256, as amended by SB 369, 87th Texas Legislature, Regular Session, 2021; 28.053; 29.907; 33.081; and 38.003.

(Agenda Exhibit) II-4

(4) Approval of Updates and Substitutions to Adopted Instructional Materials

This item provides the opportunity for the committee to approve update and/or substitution requests received since the last board meeting. The updated content has been reviewed by subject-area specialists and determined to address the pertinent student expectations in a manner equal to the content initially reviewed and approved by the state review panel. Statutory authority is the Texas Education Code (TEC), §31.003 and §31.022.

(Agenda Exhibit) II-10

(5) Approval of Costs to Administer the 2021–2022 State-Developed Assessments to Private School Students

Texas Education Code, §39.033, allows a private school to voluntarily assess its students with the State of Texas Assessments of Academic Readiness (STAAR) and the Texas English Language Proficiency Assessment System (TELPAS) assessments. The State Board of Education must approve the per-student cost to private schools, which may not exceed the cost of administering the same assessment to a student enrolled in a public-school district. This item requests approval of these costs for the 2021–2022 school year. Statutory authority is the Texas Education Code (TEC), §39.033.

(Agenda Exhibit) III-1

(6) Ratification of the Purchases and Sales of the Investment Portfolio of the Permanent School Fund for the Months of July, August, and September 2021

This item provides an opportunity for the committee and board to consider approval of the purchases and sales of investments executed in the portfolio of the Permanent School Fund for the months of July, August, and September 2021. Statutory authority is the Texas Constitution, Article VII, §2 and §5; and 19 Texas Administrative Code (TAC), Chapter 33.

(Agenda Exhibit) III-6

(7) Report on Permanent School Fund Liquid Account and Ratification of Purchases and Sales for the Months of July, August, and September 2021

This item provides an opportunity for the committee and board to receive a status update report on the liquid account and consider approval of the purchases and sales of investments executed in the liquid account for the months of July, August, and September 2021. Statutory authority is the Texas Constitution, Article VII, §2 and §5; Texas Natural Resources Code (NRC), §51.414, as repealed by SB 1232, 87th Legislature, Regular Session, 2021; and 19 Texas Administrative Code (TAC) Chapter 33.

(Agenda Exhibit) III-7

(8) Review of the Permanent School Fund Liquid Account Strategic Asset Allocation

This item provides an opportunity for the committee and board to review the Permanent School Fund liquid account strategic asset allocation. Statutory authority is the Texas Constitution, Article VII, §2 and §5; Texas Natural Resources Code (NRC), §51.414, as repealed by SB 1232, 87th Legislature, Regular Session, 2021; and 19 Texas Administrative Code (TAC) Chapter 33.

(Agenda Exhibit) III-8

(9) Review of the Absolute Return Asset Class for the Permanent School Fund

This item provides an opportunity for the committee and board to review the absolute return asset class. Statutory authority is the Texas Constitution, Article VII, §5 and §2; and 19 Texas Administrative Code (TAC), Chapter 33.

(Agenda Exhibit) III-10

(10) Proposed New 19 TAC Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation (First Reading and Filing Authorization)

This item presents for first reading and filing authorization proposed new 19 Texas Administrative Code (TAC) Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation. The proposed new section would address the term length of State Board of Education (SBOE) members on the board of directors of the Texas Permanent School Fund (PSF) Corporation as required by Senate Bill (SB) 1232, 87th Texas Legislature, Regular Session, 2021. Statutory authority is the Texas Constitution, Article VII, §5(a) and (f), and Texas Education Code (TEC), §43.001 and §43.053, as added by SB 1232, 87th Legislature, Regular Session, 2021.

(Agenda Exhibit) III-11

(11) Recommendation for Reappointments to the Fort Sam Houston Independent School District Board of Trustees

This item provides an opportunity for the board to consider three reappointments to the board of trustees of Fort Sam Houston Independent School District (ISD). The reappointments are necessary due to the expiration of the terms of office of three board members. Statutory authority is the Texas Education Code (TEC), §11.352, and Texas Administrative Code (TAC) 61.2.

(Agenda Exhibit) IV-1

(12) Approval of Applicability of State Statute to Special Purpose School Districts

This item provides an opportunity for the committee and board to consider and approve an updated list by section of the Texas Education Code (TEC), Title I and Title II, and recommendations regarding which sections of the code should apply or not apply to the operations of Texas Tech University K-12 and The University of Texas at Austin High School. Statutory authority is the Texas Education Code (TEC), §11.351.

(Agenda Exhibit) IV-13

COMMITTEE OF THE FULL BOARD

Texas Higher Education Coordinating Board Commissioner's Comments

November 16, 2021

COMMITTEE OF THE FULL BOARD: DISCUSSION
STATE BOARD OF EDUCATION: NO ACTION

SUMMARY: This item provides an opportunity for the board to receive updates from the Commissioner of Higher Education on 60x30TX and other matters related to higher education in Texas.

BOARD RESPONSE: Review and comment.

BACKGROUND INFORMATION AND JUSTIFICATION: On an as needed basis, the board will be briefed on significant higher education issues and events.

Staff Member Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services

Report from the Commissioner of Education Regarding Instructional Materials Offered for Adoption under *Proclamation 2022*

November 19, 2021

**COMMITTEE OF THE FULL BOARD: ACTION
STATE BOARD OF EDUCATION: ACTION**

SUMMARY: This item provides the opportunity for the State Board of Education to adopt materials submitted for review in response to *Proclamation 2022*. The board issued *Proclamation 2022* in April 2020, calling for instructional materials for health and physical education. Products submitted in response to *Proclamation 2022* were reviewed in the summer of 2021. This item presents the final report from the commissioner of education regarding the coverage of the Texas Essential Knowledge and Skills, alleged factual errors, and information regarding whether a publisher on the list has previously refused to rebid instructional materials.

STATUTORY AUTHORITY: Texas Education Code (TEC), §31.023 and §31.024.

TEC, §31.023(a), requires the SBOE to adopt a list of instructional materials that meet applicable physical specifications and contain material covering at least half of the applicable TEKS in the student version and in the teacher version.

TEC, §31.023(b), requires that each instructional material on the list must be free from factual errors, suitable for the subject and grade level for which the instructional material was submitted, and reviewed by academic experts in the subject and grade level for which the instructional material was submitted.

TEC §31.024, requires the SBOE to make decisions to place material on the adopted list or reject material by majority vote and to provide a list of adopted materials no later than December 1 of the year prior to the year the materials are expected to be in classrooms.

The full text of statutory citations can be found in the statutory authority section of this agenda.

BACKGROUND INFORMATION AND JUSTIFICATION: *Proclamation 2022* was issued by the SBOE in April 2020. Amendments to *Proclamation 2022* were approved at the April 2021 SBOE meeting. The board ratified a deadline extension in *Proclamation 2022* extending the publisher deadline for submitting preliminary and final correlations, pre-adoption samples, and related deliverables and to allow publishers more time to create materials aligned to the newly revised Texas Essential Knowledge and Skills (TEKS).

The review of *Proclamation 2022* instructional materials concluded in August 2021.

MOTION TO BE CONSIDERED: The State Board of Education:

Require that all publishers make corrections listed in the *Proclamation 2022 Report of Required Corrections*, the *Report of New Content*, and the *Report of Editorial Changes*;

Require that all instructional materials meet established manufacturing standards and specifications;

Require that all electronic instructional materials comply with the Web Content Accessibility Guidelines, Level 2.1 AA and the technical standards required by the Federal Rehabilitation Act, Section 508;

Approve changes and corrections submitted in response to written comments and public testimony; and

Place instructional materials submitted for adoption on the adopted list as indicated on the Proclamation 2022 *List of Instructional Materials Eligible for Adoption*.

Staff Members Responsible:

Melissa Lautenschlager, Director, Instructional Materials and Implementation
Amie Williams, Director, Instructional Materials Review and Procurement

Attachment I:

[Proclamation 2022 *List of Instructional Materials Eligible for Adoption*](#)

Attachment II:

[Proclamation 2022 *Report of Required Corrections*](#)

Attachment III:

[Proclamation 2022 *Report of Editorial Changes*](#)

Attachment IV:

[Proclamation 2022 *Report New Content*](#)

Separate Exhibit I:

Proclamation 2022 *Report of Required Corrections*—Additional Corrections Reported after 8/23/2021
(to be provided at the November 2021 SBOE meeting)

Separate Exhibit II:

Proclamation 2022 *Report of Editorial Changes*—Additional Changes Reported after 8/23/2021
(to be provided at the November 2021 SBOE meeting)

Separate Exhibit III:

Proclamation 2022 *Public Comments*
(to be provided at the November 2021 SBOE meeting)

Implementation of Senate Bill (SB) 1232, 87th Legislature, Regular Session, 2021

November 19, 2021

COMMITTEE OF THE FULL BOARD: ACTION STATE BOARD OF EDUCATION: CONSENT

SUMMARY: This item provides an opportunity for the State Board of Education (SBOE) to consider the approval of the creation of the Texas Permanent School Fund (PSF) Corporation and appointment of initial board members of the Texas PSF Corporation, provide initial approval of the Certificate of Formation, and address other matters related to the Texas PSF Corporation as outlined in SB 1232.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#); Texas Education Code (TEC), [§43.052\(a\)](#) and [§43.052\(b\)](#); and [SB 1232](#), 87th Legislature, Regular Session, 2021.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the SBOE to manage and invest the permanent school fund in accordance with the prudent person standard.

TEC, §43.052(a), allows the SBOE to incorporate the Texas PSF Corporation and delegate to the corporation the board's authority to manage and invest the permanent school fund and charter district guarantee reserve fund.

TEC, §43.052(b), requires the SBOE to adopt the initial articles of incorporation for the corporation.

The full text of statutory citations can be found in the statutory authority section of this agenda.

FUTURE ACTION EXPECTED: The SBOE is expected to implement SB 1232.

BACKGROUND INFORMATION AND JUSTIFICATION: SB 1232 was passed by the 87th Texas Legislature, Regular Session, 2021. The bill authorizes the SBOE to create the Texas Permanent School Fund Corporation (Corporation) and delegate its authority to manage and invest the PSF to the Corporation.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

Consideration of Amendment to Texas Certificate of High School Equivalency Contract

November 19, 2021

COMMITTEE OF THE FULL BOARD: ACTION STATE BOARD OF EDUCATION: ACTION

SUMMARY: This item provides the opportunity for the State Board of Education to consider an amendment to the current Texas Certificate of High School Equivalency Examination Provider contract requested by the vendor.

STATUTORY AUTHORITY: Texas Education Code (TEC), §7.111.

Texas Education Code (TEC), §7.111, requires the State Board of Education (SBOE) to adopt rules to develop and deliver high school equivalency examinations and provide for the administration of the examinations online.

PREVIOUS BOARD ACTION: The SBOE adopted 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter C, Texas Certificate of High School Equivalency, to be effective September 1, 1996. Rules in 19 TAC Subchapter C, were last amended to be effective December 25, 2016. The board approved awarding a contract for the Texas Certificate of High School Equivalency Examination Provider to GED Testing Service at the April 2021 board meeting.

BACKGROUND INFORMATION AND JUSTIFICATION: In January 2015, the Texas Education Agency (TEA) released a competitive request for proposals (RFP) to solicit proposals for a provider for the Texas Certificate of High School Equivalency examination. At the April 2015 SBOE meeting, TEA staff presented the results of the RFP. The SBOE requested that TEA extend the existing provider's Memorandum of Understanding for six months beyond the expiration date and begin the development of a new RFP to potentially identify multiple test providers.

At the July 2015 meeting, the committee held a public hearing. Additionally, at the July 2015 meeting, the board approved a decision matrix of requirements to be included in a future RFP. During the September 2015 meeting, the board approved the competitive RFP to be released in fall 2015.

On January 29, 2016, the board voted to award contracts to three separate companies to provide high school equivalency assessments in Texas. The three companies are Data Recognition Corporation, Educational Testing Service, and GED Testing Service. On September 16, 2016, the board gave the chair authority to sign new contracts with vendors beginning October 8, 2016, or when the vendors were ready to provide services and staff and the board chair were confident the vendor was able to execute the terms of the Request for Proposals.

On November 18, 2016, the board approved expanding the entities eligible to serve as official paper-based testing centers and defined the requirements for paper-based testing centers.

On November 16, 2018, the board instructed staff to proceed with renewal of existing contracts.

On February 1, 2019, the board approved the contract renewal for GED Testing Service with no amendments and approved the contract renewal for Educational Testing Service with an amendment to

increase pricing for certain tests and services. Data Recognition Corporation notified TEA that it did not wish to renew its contract which would expire on August 31, 2019.

On November 15, 2019, the board instructed staff to proceed with the fiscal year 2021 renewal of existing contracts with GED Testing Service and Educational Testing Service and to proceed with the competitive procurement process for a fiscal year 2022 award.

On November 20, 2020, the board approved the content of the Texas Certificate of High School Equivalency Request for Proposals (RFP) for test providers.

On April 16, 2021, the board approved awarding a contract for the Texas Certificate of High School Equivalency Examination Provider to GED Testing Service, the sole respondent to the RFP. GED Testing Service has requested approval to increase the price of their GED Ready practice test.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve the GED Testing Service's request for a contract amendment to increase pricing for the GED Ready practice test.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services

Cindee Tonnesen, Assistant Director, Texas Certificate of High School Equivalency, College, Career, and Military Preparation

**Discussion of Proposed Amendments to 19 TAC Chapter 120,
Other Texas Essential Knowledge and Skills, Subchapter A, Character Traits**

November 16, 2021

**COMMITTEE OF THE FULL BOARD: DISCUSSION
STATE BOARD OF EDUCATION: NO ACTION**

SUMMARY: This item provides an opportunity for the committee to discuss proposed amendments to 19 Texas Administrative Code (TAC) Chapter 120, Other Texas Essential Knowledge and Skills, Subchapter A, Character Traits, §120.3, Texas Essential Knowledge and Skills for Positive Character Traits, Kindergarten-Grade 2, Adopted 2020; §120.5, Texas Essential Knowledge and Skills for Positive Character Traits, Grades 3-5, Adopted 2020; §120.7, Texas Essential Knowledge and Skills for Positive Character Traits, Grades 6-8, Adopted 2020; and §120.9, Texas Essential Knowledge and Skills for Positive Character Traits, Grades 9-12, Adopted 2020. The proposed amendments would update the standards for positive character traits to align with requirements of Senate Bill (SB) 123, 87th Texas Legislature, Regular Session, 2021.

STATUTORY AUTHORITY: Texas Education Code (TEC), §§7.102(c)(4); 28.002(a) and (c); and 29.906, as amended by SB 123, 87th Texas Legislature, Regular Session, 2021.

TEC, §7.102(c)(4), requires the State Board of Education (SBOE) to establish curriculum and graduation requirements.

TEC, §28.002(a), identifies the subjects of the required curriculum.

TEC, §28.002(c), requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments.

TEC, §29.906, as amended by SB 123, 87th Texas Legislature, Regular Session, 2021, requires the SBOE to integrate positive character traits and personal skills into the essential knowledge and skills adopted for Kindergarten-Grade 12, as appropriate.

The full text of statutory citations can be found in the statutory authority section of this agenda.

EFFECTIVE DATE: The proposed effective date of the proposed amendments is August 1, 2022. Under TEC, §7.102(f), the SBOE must approve the rule action at second reading and final adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2022-2023 school year. The earlier effective date will allow districts of innovation that begin school prior to the statutorily required start date to implement the proposed rulemaking when they begin their school year.

FUTURE ACTION EXPECTED: The proposed amendments to Chapter 120, Subchapter A, will be presented for first reading and filing authorization at the January 2022 SBOE meeting.

PREVIOUS BOARD ACTION: The SBOE adopted the TEKS for positive character traits effective August 1, 2019, for implementation beginning with the 2021-2022 school year.

BACKGROUND INFORMATION AND JUSTIFICATION: In 2019, the 86th Texas Legislature passed House Bill 1026, requiring the SBOE to integrate positive character traits into the essential knowledge and

skills adopted for Kindergarten–Grade 12, as appropriate. The legislation required the SBOE to include the following positive character education traits in the standards: courage; trustworthiness, including honesty, reliability, punctuality, and loyalty; integrity; respect and courtesy; responsibility, including accountability, diligence, perseverance, and self-control; fairness, including justice and freedom from prejudice; caring, including kindness, empathy, compassion, consideration, patience, generosity, and charity; good citizenship, including patriotism, concern for the common good and the community, and respect for authority and the law; school pride; and gratitude. The legislation also required school districts and open-enrollment charter schools to adopt a character education program that includes the required positive character traits. At the January 2020 SBOE meeting, a discussion item on character traits instruction was presented to the Committee of the Full Board. The committee requested that staff prepare a proposal to add essential knowledge and skills for positive character traits as a new chapter in the TAC. The SBOE adopted the TEKS for positive character traits effective August 1, 2019. The new TEKS were implemented beginning with the 2021-2022 school year.

The 87th Texas Legislature, Regular Session, 2021, passed SB 123, which requires the SBOE to add personal skills to the TEKS for positive character traits. The legislation added responsible decision-making skills, interpersonal skills, and self-management skills to the required topics to be addressed in the standards.

The proposed amendments to §§120.3, 120.5, 120.7, and 120.9 would add the required new topics to the TEKS for positive character traits in Kindergarten–Grade 12.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services

Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Separate Exhibit:

Text of Proposed Amendments to 19 TAC Chapter 120, Other Texas Essential Knowledge and Skills, Subchapter A, Character Traits

(to be provided at the November 2021 SBOE meeting)

Commissioner's Comments

November 17, 2021

COMMITTEE OF THE FULL BOARD: DISCUSSION
STATE BOARD OF EDUCATION: NO ACTION

SUMMARY: This item provides an opportunity for the board to be briefed on current agenda items, agency operations, policy implementation, and public education-related legislation.

BOARD RESPONSE: Review and comment.

BACKGROUND INFORMATION AND JUSTIFICATION: On an as needed basis, the board will be briefed on significant public education issues and events.

Staff Member Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services

**Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science,
Subchapter A, Elementary, §§112.1-112.7, and Subchapter B, Middle School, §§112.25-112.28
(Second Reading and Final Adoption)**

November 19, 2021

**COMMITTEE OF THE FULL BOARD: ACTION
STATE BOARD OF EDUCATION: ACTION**

SUMMARY: This item presents for second reading and final adoption proposed new 19 Texas Administrative Code (TAC) Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021. The proposed new sections would update the standards to better align the content and ensure the standards remain current. No changes are recommended since approved for first reading.

STATUTORY AUTHORITY: Texas Education Code (TEC), §7.102(c)(4) and §28.002(a), (c), and (j).

TEC, §7.102(c)(4), requires the State Board of Education (SBOE) to establish curriculum and graduation requirements.

TEC, §28.002(a), identifies the subjects of the required curriculum.

TEC, §28.002(c), requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments.

TEC, §28.002(j), allows the SBOE to require laboratory instruction in secondary science courses and require a specific amount or percentage of time in a secondary science course that must be laboratory instruction.

The full text of statutory citations can be found in the statutory authority section of this agenda.

EFFECTIVE DATE: The proposed effective date of the proposed new sections is 20 days after filing as adopted with the Texas Register. Under TEC, §7.102(f), the SBOE must approve the rule action at second reading and final adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2022-2023 school year. The earlier effective date will enable districts to begin preparing for implementation of the revised elementary and middle school science Texas Essential Knowledge and Skills (TEKS).

PREVIOUS BOARD ACTION: The SBOE originally adopted the TEKS for science effective September 1, 1998. The SBOE adopted revisions to the science TEKS for high school effective August 4, 2009, and August 27, 2018. At the November 2020 SBOE meeting, the board approved for second reading and final adoption proposed new 19 TAC §§112.41-112.45 with an effective date of 20 days after

filing as adopted with the Texas Register. At the June 2021 SBOE meeting, the board approved for second reading and final adoption proposed new 19 TAC §§112.46-112.51 with an effective date of 20 days after filing as adopted with the Texas Register. A discussion item on 19 TAC §§112.1-112.7 and 112.25-112.28 was presented to the Committee of the Full Board at the April and June 2021 SBOE meetings. At the September 2021 SBOE meeting, the board approved for first reading and filing authorization proposed new 19 TAC §§112.1-112.7 and 112.25-112.28.

BACKGROUND INFORMATION AND JUSTIFICATION: In accordance with statutory requirements that the SBOE by rule identify the essential knowledge and skills of each subject in the required curriculum, the SBOE follows a board-approved cycle to review and revise the essential knowledge and skills for each subject.

At the September 2019 meeting, SBOE members were asked to designate content advisors for the review and revision of the science TEKS. In December 2019, applications to serve on science TEKS review work groups were posted on the Texas Education Agency (TEA) website. Additionally, in December 2019, TEA distributed a survey to collect information from educators regarding the review and revision of the science TEKS. TEA staff provided applications for the science review work groups to SBOE members on a monthly basis from December 2019 to June 2020 and in September, October, and December 2020. At the January 2020 SBOE meeting, the SBOE provided specific guidance for the TEKS review work groups.

Also in January 2020, science TEKS review content advisors met in a face-to-face meeting to develop consensus recommendations regarding revisions to the science TEKS to share with future work groups. At that time, the content advisors met with representatives from Work Group A to discuss the consensus recommendations. Work Group A convened in February 2020 to review survey results, content advisor consensus recommendations, and the SBOE's guidance to work groups to develop recommendations for how science TEKS review work groups can address these areas. Work Group B was convened virtually in June 2020 to develop recommendations for four high school science courses: Biology, Chemistry, Integrated Physics and Chemistry, and Physics. In November 2020, the SBOE approved for second reading and final adoption proposed new §§112.41-112.45 for implementation beginning in the 2023-2024 school year.

Work Group D was convened for monthly meetings from November 2020-February 2021 to develop recommendations for TEKS for five additional high school science courses: Aquatic Science, Astronomy, Earth and Space Science, Environmental Systems, and a new course Specialized Topics in Science. In June 2021, the board gave final approval to the additional high school science courses. Specialized Topics in Science was approved for implementation beginning in the 2022-2023 school year. Aquatic Science, Astronomy, Earth and Space Science, and Environmental Systems were approved for implementation beginning in the 2024-2025 school year.

Between August and November 2020, Work Group C convened for a series of virtual meetings to develop recommendations for the Grades 6-8 science TEKS. Work Group E was convened for monthly meetings between January and March 2021 to develop recommendations for the science TEKS for Kindergarten-Grade 5. Work Groups C and E were reconvened in May and June 2021 to address public feedback and revise their draft recommendations. Work Group F was convened for a series of virtual meetings in July 2021 to address SBOE feedback provided at the April and June 2021 SBOE meetings, vertically align the elementary and middle school standards, meet with content advisors, and finalize the draft recommendations for the Kindergarten-Grade 8 TEKS for science. At the September 2021 SBOE meeting, the board approved for first reading and filing authorization proposed new TEKS for Kindergarten-Grade 5 science.

No changes are recommended since approved for first reading.

FISCAL IMPACT: No changes have been made to this section since published as proposed.

TEA has determined that for the first five years the proposal is in effect (2022-2026), there are no fiscal implications to the state. However, in fiscal years 2019 and 2020, there was a fiscal impact to TEA to reimburse committee members for travel to review the science TEKS. For fiscal year 2020, the estimated cost to TEA was \$23,609. There will also be implications for TEA if the state develops professional development to help teachers and administrators understand the revised TEKS. Any professional development that is created would be based on whether TEA received an appropriation for professional development in the next biennium.

There may be fiscal implications for school districts and charter schools to implement the proposed revisions to the TEKS, which may include the need for professional development and revisions to district-developed databases, curriculum, and scope and sequence documents. Since curriculum and instruction decisions are made at the local district level, it is difficult to estimate the fiscal impact on any given district.

LOCAL EMPLOYMENT IMPACT: No changes have been made to this section since published as proposed.

The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: No changes have been made to this section since published as proposed.

The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: No changes have been made to this section since published as proposed.

The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: No changes have been made to this section since published as proposed.

The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: No changes have been made to this section since published as proposed.

TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would create new regulations by proposing revised science TEKS required to be offered by school districts and charter schools.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand, limit, or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: No changes have been made to this section since published as proposed.

The proposal would better align the TEKS and coordinate the standards with the adoption of instructional materials. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: No changes have been made to this section since published as proposed.

The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: No changes have been made to this section since published as proposed.

TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: Following the September 2021 SBOE, notice of proposed new 19 TAC §§112.1-112.7 and 112.25-112.28 was filed with the Texas Register, initiating the public comment period. The public comment period began October 8, 2021, and ended at 5:00 p.m. on November 12, 2021. No comments had been received at the time this item was prepared. A summary of public comments received will be provided to the SBOE prior to and during the November 2021 meeting. The SBOE will take registered oral and written comments on the proposal at the appropriate committee meeting in November 2021 in accordance with the SBOE board operating policies and procedures.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve for second reading and final adoption proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021; and

Make an affirmative finding that immediate adoption of the proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter

B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register. (*Per TEC, §7.102(f), a vote of two-thirds of the members of the board is necessary for an earlier effective date.*)

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Attachment I:

Text of Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021

Attachment II:

Text of Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021

ATTACHMENT I
Text of Proposed New 19 TAC

Chapter 112. Texas Essential Knowledge and Skills for Science

Subchapter A. Elementary

§112.1. Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021.

- (a) The provisions of §§112.2-112.7 of this subchapter shall be implemented by school districts.
- (b) No later than July 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for science as adopted in §§112.2-112.7 of this subchapter.
- (c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§112.2-112.7 of this subchapter shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
- (d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than July 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §§112.2-112.7 of this subchapter shall be implemented for the following school year.
- (e) Sections 112.11-112.16 of this subchapter shall be superseded by the implementation of §§112.2-112.7 of this subchapter.

§112.2. Science, Kindergarten, Adopted 2021.

- (a) Introduction.
 - (1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation in science. In Kindergarten, the following concepts will be addressed in each strand.
 - (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
 - (iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 80% of instructional time.
 - (B) Matter and its properties. Students build their knowledge of the natural world using their senses. The students focus on observable properties and patterns of objects, including shape, color, texture, and material.

- (C) Force, motion, and energy. Students explore the location, motion, and position of objects and investigate the importance of light energy as it relates to the students' everyday lives. Students focus on demonstrating light energy sources and their effect on objects.
 - (D) Earth and space. Patterns are recognizable in the natural world and among objects in the sky. Students understand that weather, seasons of the year, and day and night are repeated patterns. Materials found on Earth can be used and classified.
 - (E) Organisms and environments. All living organisms satisfy basic needs through interactions with nonliving things and living organisms, and they have structures and functions that help them survive within their environments. Students investigate the life cycle of plants and identify likenesses between parents and young.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.
- (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (b) Knowledge and skills.
- (1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;
 - (C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

- (D) use tools, including hand lenses, goggles, trays, cups, bowls, sieves or sifters, notebooks, terrariums, aquariums, samples (rocks, sand, soil, loam, gravel, clay, seeds, and plants), windsock, demonstration thermometer, rain gauge, straws, ribbons, non-standard measuring items, blocks or cubes, tuning fork, various flashlights, small paper cups, items that roll, noise makers, hot plate, opaque objects, transparent objects, foil pie pans, foil muffin cups, wax paper, technology, Sun-Moon-Earth model, and plant life cycle model to observe, measure, test, and compare;
 - (E) collect observations and measurements as evidence;
 - (F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and
 - (G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.
- (2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify basic advantages and limitations of models such as their size, properties, and materials;
 - (B) analyze data by identifying significant features and patterns;
 - (C) use mathematical concepts to compare two objects with common attributes; and
 - (D) evaluate a design or object using criteria to determine if it works as intended.
- (3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) explain how science or an innovation can help others; and
 - (B) identify what scientists and engineers are and explore what different scientists and engineers do.
- (5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:
- (A) identify and use patterns to describe phenomena or design solutions;
 - (B) investigate and predict cause-and-effect relationships in science;
 - (C) describe the properties of objects in terms of relative size (scale) and relative quantity;
 - (D) examine the parts of a whole to define or model a system;
 - (E) identify forms of energy and properties of matter;
 - (F) describe the relationship between the structure and function of objects, organisms, and systems; and
 - (G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.

- (6) Matter and its properties. The student knows that objects have physical properties that determine how they are described and classified. The student is expected to identify and record observable physical properties of objects, including shape, color, texture, and material, and generate ways to classify objects.
- (7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to describe and predict how a magnet interacts with various materials and how magnets can be used to push or pull.
- (8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:
- (A) communicate the idea that objects can only be seen when a light source is present and compare the effects of different amounts of light on the appearance of objects; and
 - (B) demonstrate and explain that light travels through some objects and is blocked by other objects, creating shadows.
- (9) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:
- (A) identify, describe, and predict the patterns of day and night and their observable characteristics; and
 - (B) observe, describe, and illustrate the Sun, Moon, stars, and objects in the sky such as clouds.
- (10) Earth and space. The student knows that the natural world includes earth materials and systems that can be observed. The student is expected to:
- (A) describe and classify rocks by the observable properties of size, shape, color, and texture;
 - (B) observe and describe weather changes from day to day and over seasons; and
 - (C) identify evidence that supports the idea that air is all around us and demonstrate that wind is moving air using items such as a windsock, pinwheel, or ribbon.
- (11) Earth and space. The student knows that earth materials are important to everyday life. The student is expected to observe and generate examples of practical uses for rocks, soil, and water.
- (12) Organisms and environments. The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to:
- (A) observe and identify the dependence of plants on air, sunlight, water, nutrients in the soil, and space to grow; and
 - (B) observe and identify the dependence of animals on air, water, food, space, and shelter.
- (13) Organisms and environments. The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:
- (A) identify the structures of plants, including roots, stems, leaves, flowers, and fruits;
 - (B) identify the different structures that animals have that allow them to interact with their environment such as seeing, hearing, moving, and grasping objects;
 - (C) identify and record the changes from seed, seedling, plant, flower, and fruit in a simple plant life cycle; and
 - (D) identify ways that young plants resemble the parent plant.

§112.3. Science, Grade 1, Adopted 2021.

- (a) Introduction.

- (1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation in science. In Grade 1, the following concepts will be addressed in each strand.
- (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
- (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
- (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
- (iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 80% of instructional time.
- (B) Matter and its properties. Students build their knowledge of the natural world using their senses. Students focus on observable properties and patterns of objects, including larger and smaller, heavier and lighter, shape, color, and texture. The students understand changes in materials caused by heating and cooling.
- (C) Force, motion, and energy. Students know that force and motion are related and that energy exists in many forms as a part of everyday life. Magnetism interacts with various materials and can be used as a push and pull. The students investigate the importance of heat and focus on changes caused by heating and cooling.
- (D) Earth and space. Patterns, cycles, and systems are recognizable in the natural world and among objects in the sky. Students make informed choices by understanding weather and seasonal patterns. Students understand that natural resources on Earth, including rocks, soil, and water, are used by humans and can be conserved.
- (E) Organisms and environments. All living organisms interact with living and nonliving things within their environments and use structures to meet their basic needs. Students know that organisms are interdependent and part of a food chain. The students investigate the life cycle of animals and identify likenesses between parents and young.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
- (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.
- (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (b) Knowledge and skills.
- (1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
- (B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;
- (C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;
- (D) use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, sieves/sifters, tweezers, primary balance, notebooks, terrariums, aquariums, stream tables, soil samples (loam, sand, gravel, rocks, and clay), seeds, plants, windsock, pinwheel, student thermometer, demonstration thermometer, rain gauge, straws, ribbons, non-standard measuring items, flashlights, sandpaper, wax paper, items that are magnetic, non-magnetic items, a variety of magnets, hot plate, aluminum foil, technology, Sun-Moon-Earth model, and plant and animal life cycle models to observe, measure, test, and compare;
- (E) collect observations and measurements as evidence;
- (F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and
- (G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.
- (2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify basic advantages and limitations of models such as their size, properties, and materials;
- (B) analyze data by identifying significant features and patterns;
- (C) use mathematical concepts to compare two objects with common attributes; and
- (D) evaluate a design or object using criteria to determine if it works as intended.
- (3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

- (A) develop explanations and propose solutions supported by data and models;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:
- (A) explain how science or an innovation can help others; and
 - (B) identify what scientists and engineers are and explore what different scientists and engineers do.
- (5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:
- (A) identify and use patterns to describe phenomena or design solutions;
 - (B) investigate and predict cause-and-effect relationships in science;
 - (C) describe the properties of objects in terms of relative size (scale) and relative quantity;
 - (D) examine the parts of a whole to define or model a system;
 - (E) identify forms of energy and properties of matter;
 - (F) describe the relationship between structure and function of objects, organisms, and systems; and
 - (G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.
- (6) Matter and its properties. The student knows that objects have physical properties that determine how they are described and classified. The student is expected to:
- (A) classify objects by observable physical properties, including, shape, color, and texture, and attributes such as larger and smaller and heavier and lighter;
 - (B) explain and predict changes in materials caused by heating and cooling; and
 - (C) demonstrate and explain that a whole object is a system made of organized parts such as a toy that can be taken apart and put back together.
- (7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to:
- (A) explain how pushes and pulls can start, stop, or change the speed or direction of an object's motion; and
 - (B) plan and conduct a descriptive investigation that predicts how pushes and pulls can start, stop, or change the speed or direction of an object's motion.
- (8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:
- (A) investigate and describe applications of heat in everyday life such as cooking food or using a hair dryer; and
 - (B) describe how some changes caused by heat may be reversed such as melting butter and other changes cannot be reversed such as cooking an egg or baking a cake.

- (9) Earth and space. The student knows that the natural world has recognizable patterns. The student is expected to describe and predict the patterns of seasons of the year such as order of occurrence and changes in nature.
- (10) Earth and space. The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:
- (A) investigate and document the properties of particle size, shape, texture, and color and the components of different types of soils such as topsoil, clay, and sand;
 - (B) investigate and describe how water can move rock and soil particles from one place to another;
 - (C) compare the properties of puddles, ponds, streams, rivers, lakes, and oceans, including color, clarity, size, shape, and whether it is freshwater or saltwater; and
 - (D) describe and record observable characteristics of weather, including hot or cold, clear or cloudy, calm or windy, and rainy or icy, and explain the impact of weather on daily choices.
- (11) Earth and space. The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:
- (A) identify and describe how plants, animals, and humans use rocks, soil, and water; and
 - (B) describe ways to conserve and protect natural sources of water such as turning off the faucet when brushing teeth and keeping trash out of bodies of water.
- (12) Organisms and environments. The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to:
- (A) classify living and nonliving things based upon whether they have basic needs and produce young;
 - (B) describe and record examples of interactions and dependence between living and nonliving components in terrariums or aquariums; and
 - (C) identify and illustrate how living organisms depend on each other through food chains.
- (13) Organisms and environments. The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:
- (A) identify the external structures of different animals and compare how those structures help different animals live, move, and meet basic needs for survival;
 - (B) record observations of and describe basic life cycles of animals, including a bird, a mammal, and a fish; and
 - (C) compare ways that young animals resemble their parents.

§112.4. Science, Grade 2, Adopted 2021.

(a) Introduction.

- (1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation in science. In Grade 2, the following concepts will be addressed in each strand.
- (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which

involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

- (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
 - (iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 60% of instructional time.
- (B) Matter and its properties. Students build upon their knowledge of the natural world using their senses. The students focus on physical properties of matter and determine how observable properties can be changed through various processes. Students use these processes to form new objects.
- (C) Force, motion, and energy. Students know that force and motion are related and that energy exists in many forms as a part of everyday life. Magnetism interacts with various materials and can be used as a push and pull. The students investigate sound energy and focus on how sound affects objects.
- (D) Earth and space. Students observe objects in the sky, including the Sun and the Moon, and collect and analyze weather data. In addition, students identify natural and manmade resources and how they can be conserved.
- (E) Organisms and environments. All living organisms interact with living and nonliving things within their environments and use structures to meet their basic needs. Students understand that organisms are interdependent and part of a food chain. The students investigate the life cycle of animals and identify likenesses between parents and young.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.
- (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented.

Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;

(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, notebooks, stream tables, soil, sand, gravel, flowering plants, student thermometer, demonstration thermometer, rain gauge, flashlights, ramps, balls, spinning tops, drums, tuning forks, sandpaper, wax paper, items that are flexible, non-flexible items, magnets, hot plate, aluminum foil, technology, Sun-Moon-Earth model, and frog and butterfly life cycle models to observe, measure, test, and compare;

(E) collect observations and measurements as evidence;

(F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify basic advantages and limitations of models such as their size, properties, and materials;

(B) analyze data by identifying significant features and patterns;

(C) use mathematical concepts to compare two objects with common attributes; and

(D) evaluate a design or object using criteria to determine if it works as intended.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:

(A) explain how science or an innovation can help others; and

- (B) identify what scientists and or engineers are and explore what different scientists and engineers do.
- (5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:
- (A) identify and use patterns to describe phenomena or design solutions;
- (B) investigate and predict cause-and-effect relationships in science;
- (C) measure and describe the properties of objects in terms of size and quantity;
- (D) examine the parts of a whole to define or model a system;
- (E) identify forms of energy and properties of matter;
- (F) describe the relationship between structure and function of objects, organisms, and systems; and
- (G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.
- (6) Matter and its properties. The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:
- (A) classify matter by observable physical properties, including texture, flexibility, and relative temperature, and identify whether a material is a solid or liquid;
- (B) conduct a descriptive investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing; and
- (C) demonstrate that small units such as building blocks can be combined or reassembled to form new objects for different purposes and explain the materials chosen based on their physical properties.
- (7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to:
- (A) explain how objects push on each other and may change shape when they touch or collide; and
- (B) plan and conduct a descriptive investigation to demonstrate how the strength of a push and pull changes an object's motion.
- (8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:
- (A) demonstrate and explain that sound is made by vibrating matter and that vibrations can be caused by a variety of means, including sound;
- (B) explain how different levels of sound are used in everyday life such as a whisper in a classroom or a fire alarm; and
- (C) design and build a device using tools and materials that uses sound to solve the problem of communicating over a distance.
- (9) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:
- (A) describe the Sun as a star that provides light and heat and explain that the Moon reflects the Sun's light; and
- (B) observe and compare how objects in the sky are more visible and can appear different with a telescope than with an unaided eye.
- (10) Earth and space. The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:

- (A) investigate and describe how wind and water move soil and rock particles across the Earth's surface such as wind blowing sand into dunes on a beach or a river carrying rocks as it flows;
 - (B) measure, record, and graph weather information, including temperature and precipitation; and
 - (C) investigate different types of severe weather events such as a hurricane, tornado, or flood and explain that some events are more likely than others in a given region.
- (11) Earth and space. The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:
- (A) distinguish between natural and manmade resources; and
 - (B) describe how human impact can be limited by making choices to conserve and properly dispose of materials such as reducing use of, reusing , or recycling paper, plastic, and metal.
- (12) Organisms and environments. The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to:
- (A) describe how the physical characteristics of environments, including the amount of rainfall, support plants and animals within an ecosystem;
 - (B) create and describe food chains identifying producers and consumers to demonstrate how animals depend on other living things; and
 - (C) explain and demonstrate how some plants depend on other living things, wind, or water for pollination and to move their seeds around.
- (13) Organisms and environments. The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:
- (A) identify the roots, stems, leaves, flowers, fruits, and seeds of plants and compare how those structures help different plants meet their basic needs for survival;
 - (B) record and compare how the structures and behaviors of animals help them find and take in food, water, and air;
 - (C) record and compare how being part of a group helps animals obtain food, defend themselves, and cope with changes; and
 - (D) investigate and describe some of the unique life cycles of animals where young animals do not resemble their parents, including butterflies and frogs.

§112.5. Science, Grade 3, Adopted 2021.

(a) Introduction.

- (1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 3, the following concepts will be addressed in each strand.
- (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are

- manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
- (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
 - (iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 60% of instructional time.
- (B) Matter and energy. Students build upon the knowledge learned in Kindergarten-Grade 2 by investigating the physical properties of matter. Students explore states of matter and observe that changes can occur to matter through heating and cooling. The students explore using substances by combining them to create or modify objects based on their physical properties.
- (C) Force, motion, and energy. Students manipulate objects by pushing and pulling to demonstrate changes in motion and position. Students also identify forces such as magnetism and gravity. Students understand energy exists in many forms, including mechanical, thermal, light, and sound. The students identify forms of energy in everyday life.
- (D) Earth and space. Students learn that there are recognizable processes that change the Earth over time. Students compare day-to-day changes in weather. They also investigate how soil is formed through the processes of weathering and decomposition. Students model rapid changes to Earth's surface as well as explore ways to conserve Earth's resources. Students recognize that there are identifiable objects and patterns in Earth's solar system. Students model the orbits of the Sun, Earth, and Moon as well as describe their relationship to each other. This will set the foundation for Grade 4 when they look at changes in the appearance of the Moon. Students also identify the sequence of the planets in Earth's solar system.
- (E) Organisms and environments. Students explore patterns, systems, and cycles within environments by investigating characteristics of organisms, life cycles, and interactions among all components of the natural environment. Students examine how environment and the structures and functions of animals play a key role in survival. Students know that when changes in the environment occur, organisms may thrive, become ill, or perish. Students also examine fossils as evidence of past living organisms.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be

carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

- (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

- (1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) use scientific practices to plan and conduct descriptive investigations and use engineering practices to design solutions to problems;
 - (C) demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use tools, including hand lenses; metric rulers; Celsius thermometers; wind vanes; rain gauges; graduated cylinders; beakers; digital scales; hot plates; meter sticks; magnets; notebooks; Sun, Earth, Moon system models; timing devices; materials to support observation of habitats of organisms such as terrariums, aquariums, and collecting nets; and materials to support digital data collection such as computers, tablets, and cameras, to observe, measure, test, and analyze information;
 - (E) collect observations and measurements as evidence;
 - (F) construct appropriate graphic organizers to collect data, including tables, bar graphs, line graphs, tree maps, concept maps, Venn diagrams, flow charts or sequence maps, and input-output tables that show cause and effect; and
 - (G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.
- (2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
 - (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying any significant features, patterns, or sources of error;
 - (C) use mathematical calculations to compare patterns and relationships; and
 - (D) evaluate a design or object using criteria.
- (3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
 - (A) develop explanations and propose solutions supported by data and models;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

- (C) listen actively to others' explanations to identify relevant evidence and engage respectfully in scientific discussion.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:
- (A) explain how scientific discoveries and innovative solutions to problems impact science and society; and
- (B) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.
- (5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:
- (A) identify and use patterns to explain scientific phenomena or to design solutions;
- (B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;
- (C) use scale, proportion, and quantity to describe, compare, or model different systems;
- (D) examine and model the parts of a system and their interdependence in the function of the system;
- (E) investigate the flow of energy and cycling of matter through systems;
- (F) explain the relationship between the structure and function of objects, organisms, and systems; and
- (G) explain how factors or conditions impact stability and change in objects, organisms, and systems.
- (6) Matter and energy. The student knows that matter has measurable physical properties that determine how matter is identified, classified, changed, and used. The student is expected to:
- (A) measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float in water;
- (B) describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container;
- (C) predict, observe, and record changes in the state of matter caused by heating or cooling in a variety of substances such as ice becoming liquid water, condensation forming on the outside of a glass, or liquid water being heated to the point of becoming water vapor (gas); and
- (D) demonstrate that materials can be combined based on their physical properties to create or modify objects such as building a tower or adding clay to sand to make a stronger brick and justify the selection of materials based on their physical properties.
- (7) Force, motion, and energy. The student knows the nature of forces and the patterns of their interactions. The student is expected to:
- (A) demonstrate and describe forces acting on an object in contact or at a distance, including magnetism, gravity, and pushes and pulls; and
- (B) plan and conduct a descriptive investigation to demonstrate and explain how position and motion can be changed by pushing and pulling objects such as swings, balls, and wagons.
- (8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in cycles, patterns, and systems. The student is expected to:

- (A) identify everyday examples of energy, including light, sound, thermal, and mechanical; and
 - (B) plan and conduct investigations that demonstrate how the speed of an object is related to its mechanical energy.
- (9) Earth and space. The student knows there are recognizable objects and patterns in Earth's solar system. The student is expected to:
- (A) construct models and explain the orbits of the Sun, Earth, and Moon in relation to each other; and
 - (B) identify the sequence of the planets in Earth's solar system in relation to the Sun.
- (10) Earth and space. The student knows that there are recognizable processes that change Earth over time. The student is expected to:
- (A) compare and describe day-to-day weather in different locations at the same time, including air temperature, wind direction, and precipitation;
 - (B) investigate and explain how soils such as sand and clay are formed by weathering of rock and by decomposition of plant and animal remains; and
 - (C) model and describe rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides.
- (11) Earth and space. The student understands how natural resources are important and can be managed. The student is expected to:
- (A) explore and explain how humans use natural resources such as in construction, in agriculture, in transportation, and to make products; and
 - (B) identify ways to conserve natural resources through reducing, reusing, or recycling.
- (12) Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to:
- (A) explain how temperature and precipitation affect animal growth and behavior through migration and hibernation and plant responses through dormancy;
 - (B) identify and describe the flow of energy in a food chain and predict how changes in a food chain such as removal of frogs from a pond or bees from a field affect the ecosystem;
 - (C) describe how natural changes to the environment such as floods and droughts cause some organisms to thrive and others to perish or move to new locations; and
 - (D) identify fossils as evidence of past living organisms and environments, including common Texas fossils.
- (13) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that function to help them survive within their environments. The student is expected to:
- (A) explore and explain how external structures and functions of animals such as the neck of a giraffe or webbed feet on a duck enable them to survive in their environment; and
 - (B) explore, illustrate, and compare life cycles in organisms such as beetles, crickets, radishes, or lima beans.

§112.6. Science, Grade 4, Adopted 2021.

(a) Introduction.

- (1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade

level, and establish a foundation for high school courses. In Grade 4, the following concepts will be addressed in each strand.

- (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
 - (iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 50% of instructional time.
 - (B) Matter and energy. Students investigate matter's measurable properties, including mass, volume, states, temperature, magnetism, and relative density, to determine how it is classified, changed, and used. Students compare and contrast a variety of mixtures, including solutions, and demonstrate that matter is conserved.
 - (C) Force, motion, and energy. Students investigate forces, including friction, gravity, and magnetism, to observe their effects on objects. They differentiate between mechanical, sound, light, thermal, and electrical energy. Students observe the cycle of energy and the parts of a system while exploring circuits that produce light and thermal energy. They will build on their understanding of circuits in Grade 5. As students explore thermal and electrical energy, they observe the behavior of different materials to identify patterns and label the materials as conductors or insulators.
 - (D) Earth and space. Students learn about processes on Earth that create patterns of change. These processes include the water cycle, weathering, erosion, deposition, the appearance of the Moon, and seasons. Students will build on this understanding in Grade 5 when they learn about day and night, shadows, and the rotation of Earth on its axis. Finally, students identify Earth's resources and classify them as renewable or nonrenewable.
 - (E) Organisms and environments. In this strand, students begin to understand how organisms within an ecosystem interact. Students investigate producers to learn how they make food. Students build on their understanding of food chains, from Grade 3, as they explore food webs where they describe the flow of energy and the role of producers, consumers, and decomposers. They also use fossil evidence to describe environments of the past. Additionally, students explore plant structures and their functions. Students also differentiate between inherited and acquired traits of organisms.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:

- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.
- (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (b) Knowledge and skills.
- (1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) use scientific practices to plan and conduct descriptive investigations and use engineering practices to design solutions to problems;
 - (C) demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use tools, including hand lenses; metric rulers; Celsius thermometers; calculators; laser pointers; mirrors; digital scales; balances; graduated cylinders; beakers; hot plates; meter sticks; magnets; notebooks; timing devices; sieves; materials for building circuits; materials to support observation of habitats of organisms such as terrariums, aquariums, and collecting nets; and materials to support digital data collection such as computers, tablets, and cameras, to observe, measure, test, and analyze information;
 - (E) collect observations and measurements as evidence;
 - (F) construct appropriate graphic organizers used to collect data, including tables, bar graphs, line graphs, tree maps, concept maps, Venn diagrams, flow charts or sequence maps, and input-output tables that show cause and effect; and
 - (G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.
- (2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying any significant features, patterns, or sources of error;

- (C) use mathematical calculations to compare patterns and relationships; and
 - (D) evaluate a design or object using criteria.
- (3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) listen actively to others' explanations to identify relevant evidence and engage respectfully in scientific discussion.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:
- (A) explain how scientific discoveries and innovative solutions to problems impact science and society; and
 - (B) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.
- (5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:
- (A) identify and use patterns to explain scientific phenomena or to design solutions;
 - (B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;
 - (C) use scale, proportion, and quantity to describe, compare, or model different systems;
 - (D) examine and model the parts of a system and their interdependence in the function of the system;
 - (E) investigate how energy flows and matter cycles through systems and how matter is conserved;
 - (F) explain the relationship between the structure and function of objects, organisms, and systems; and
 - (G) explain how factors or conditions impact stability and change in objects, organisms, and systems.
- (6) Matter and energy. The student knows that matter has measurable physical properties that determine how matter is identified, classified, changed, and used. The student is expected to:
- (A) classify and describe matter using observable physical properties, including temperature, mass, magnetism, relative density (the ability to sink or float in water), and physical state (solid, liquid, gas);
 - (B) investigate and compare a variety of mixtures, including solutions that are composed of liquids in liquids and solids in liquids; and
 - (C) demonstrate that matter is conserved when mixtures such as soil and water and oil and water are formed.
- (7) Force, motion, and energy. The student knows the nature of forces and the patterns of their interactions. The student is expected to plan and conduct descriptive investigations to explore the patterns of forces such as gravity, friction, or magnetism in contact or at a distance on an object.

- (8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in cycles, patterns, and systems. The student is expected to:
- (A) investigate and identify the transfer of energy by objects in motion, waves in water, and sound;
 - (B) identify conductors and insulators of thermal and electrical energy; and
 - (C) demonstrate and describe how electrical energy travels in a closed path that can produce light and thermal energy.
- (9) Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to:
- (A) collect and analyze data to identify sequences and predict patterns of change in seasons such as change in temperature and length of daylight; and
 - (B) collect and analyze data to identify sequences and predict patterns of change in the observable appearance of the Moon from Earth.
- (10) Earth and space. The student knows that there are processes on Earth that create patterns of change. The student is expected to:
- (A) describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process;
 - (B) model and describe slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice; and
 - (C) differentiate between weather and climate.
- (11) Earth and space. The student understands how natural resources are important and can be managed. The student is expected to:
- (A) identify and explain advantages and disadvantages of using Earth's renewable and nonrenewable natural resources such as wind, water, sunlight, plants, animals, coal, oil, and natural gas; and
 - (B) explain how conservation, disposal, and recycling of natural resources impact the environment.
- (12) Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to:
- (A) investigate and explain how most producers can make their own food using sunlight, water, and carbon dioxide through the cycling of matter;
 - (B) describe the cycling of matter and flow of energy through food webs, including the roles of the Sun, producers, consumers, and decomposers; and
 - (C) identify and describe past environments based on fossil evidence, including common Texas fossils.
- (13) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that function to help them survive within their environments. The student is expected to:
- (A) explore and explain how structures and functions of plants such as waxy leaves and deep roots enable them to survive in their environment; and
 - (B) differentiate between inherited and acquired physical traits of organisms.

§112.7. Science, Grade 5, Adopted 2021.

- (a) Introduction.

- (1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 5, the following concepts will be addressed in each strand.
- (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
- (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
- (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
- (iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 50% of instructional time.
- (B) Matter and energy. Students investigate matter expanding their understanding of properties learned in Grade 4 (mass, volume, states, temperature, magnetism, and relative density) to include solubility and the ability to conduct or insulate both thermal and electrical energy. Students observe the combination of substances to make mixtures and develop an understanding of conservation of matter. These concepts lead to the understanding of elements and compounds. Students will build on this understanding in middle school when they learn to determine density and to identify evidence of chemical changes.
- (C) Force, motion, and energy. Students investigate equal and unequal forces and the effects these forces have on objects (motion and direction). Additionally, students investigate energy, including mechanical, light, thermal, electrical, and sound. They uncover cycles (e.g., movement of thermal energy), patterns (e.g., behavior of light, including reflection and refraction), and systems through their exploration. Students will build on this understanding in middle school when they begin to use calculations and measurements to study force, motion, and energy through the study of Newton's Laws of Motion.
- (D) Earth and space. This strand is focused on identifying recognizable patterns and processes as students learn about Earth's rotation and demonstrate the effects this movement has on Earth's surface, including day and night, shadows, and the rotation of Earth on its axis. Students continue their learning of patterns and processes on Earth while exploring weather, climate, the water cycle, the formation of sedimentary rock and fossil fuels, and the formation of landforms. Finally, students learn ways to manage natural resources to support a healthy environment.
- (E) Organisms and environments. This strand focuses on identifying relationships, systems, and cycles within organisms and environments. Students describe the interactions of biotic and abiotic factors in an ecosystem. Students build on their understanding of food webs from Grade 4 by predicting how ecosystem changes affect the flow of energy. Additionally, they describe how humans impact the ecosystem. Students also learn how organisms' structures help them to survive, and they distinguish between instinctual and learned behaviors in animals. This will set the foundation for Grade 6 where students compare and contrast variations within organisms and how they impact survival.

- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
- (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.
- (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (b) Knowledge and skills.
- (1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
- (B) use scientific practices to plan and conduct descriptive and simple experimental investigations and use engineering practices to design solutions to problems;
- (C) demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;
- (D) use tools, including calculators, microscopes, hand lenses, metric rulers, Celsius thermometers, prisms, concave and convex lenses, laser pointers, mirrors, digital scales, balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, notebooks, timing devices, materials for building circuits, materials to support observations of habitats or organisms such as terrariums and aquariums, and materials to support digital data collection such as computers, tablets, and cameras to observe, measure, test, and analyze information;
- (E) collect observations and measurements as evidence;
- (F) construct appropriate graphic organizers used to collect data, including tables, bar graphs, line graphs, tree maps, concept maps, Venn diagrams, flow charts or sequence maps, and input-output tables that show cause and effect; and

- (G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.
- (2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
 - (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying any significant features, patterns, or sources of error;
 - (C) use mathematical calculations to compare patterns and relationships; and
 - (D) evaluate experimental and engineering designs.
- (3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
 - (A) develop explanations and propose solutions supported by data and models;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) listen actively to others' explanations to identify relevant evidence and engage respectfully in scientific discussion.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:
 - (A) explain how scientific discoveries and innovative solutions to problems impact science and society; and
 - (B) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.
- (5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:
 - (A) identify and use patterns to explain scientific phenomena or to design solutions;
 - (B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;
 - (C) use scale, proportion, and quantity to describe, compare, or model different systems;
 - (D) examine and model the parts of a system and their interdependence in the function of the system;
 - (E) investigate how energy flows and matter cycles through systems and how matter is conserved;
 - (F) explain the relationship between the structure and function of objects, organisms, and systems; and
 - (G) explain how factors or conditions impact stability and change in objects, organisms, and systems.
- (6) Matter and energy. The student knows that matter has measurable physical properties that determine how matter is identified, classified, changed, and used. The student is expected to:
 - (A) compare and contrast matter based on measurable, testable, or observable physical properties, including mass, magnetism, relative density (sinking and floating using water

- as a reference point), physical state (solid, liquid, gas), volume, solubility in water, and the ability to conduct or insulate thermal energy and electric energy;
- (B) demonstrate and explain that some mixtures maintain physical properties of their substances such as iron filings and sand and sand and water;
- (C) compare the properties of substances before and after they are combined into a solution and demonstrate that matter is conserved in solutions; and
- (D) illustrate how matter is made up of particles that are too small to be seen such as air in a balloon.
- (7) Force, motion, and energy. The student knows the nature of forces and the patterns of their interactions. The student is expected to:
- (A) investigate and explain how equal and unequal forces acting on an object cause patterns of motion and transfer of energy; and
- (B) design a simple experimental investigation that tests the effect of force on an object in a system such as a car on a ramp or a balloon rocket on a string.
- (8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in cycles, patterns, and systems. The student is expected to:
- (A) investigate and describe the transformation of energy in systems such as energy in a flashlight battery that changes from chemical energy to electrical energy to light energy;
- (B) demonstrate that electrical energy in complete circuits can be transformed into motion, light, sound, or thermal energy and identify the requirements for a functioning electrical circuit; and
- (C) demonstrate and explain how light travels in a straight line and can be reflected and refracted.
- (9) Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to demonstrate that Earth rotates on its axis once approximately every 24 hours and explain how that causes the day/night cycle and the appearance of the Sun moving across the sky, resulting in changes in shadow positions and shapes.
- (10) Earth and space. The student knows that there are recognizable patterns and processes on Earth. The student is expected to:
- (A) explain how the Sun and the ocean interact in the water cycle and affect weather;
- (B) model and describe the processes that led to the formation of sedimentary rocks and fossil fuels; and
- (C) model and identify how changes to Earth's surface by wind, water, or ice result in the formation of landforms, including deltas, canyons, and sand dunes.
- (11) Earth and space. The student understands how natural resources are important and can be managed. The student is expected to design and explain solutions such as conservation, recycling, or proper disposal to minimize environmental impact of the use of natural resources.
- (12) Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to:
- (A) observe and describe how a variety of organisms survive by interacting with biotic and abiotic factors in a healthy ecosystem;
- (B) predict how changes in the ecosystem affect the cycling of matter and flow of energy in a food web; and
- (C) describe a healthy ecosystem and how human activities can be beneficial or harmful to an ecosystem.

- (13) Organisms and environments. The student knows that organisms undergo similar life processes and have structures and behaviors that help them survive within their environments. The student is expected to:
- (A) analyze the structures and functions of different species to identify how organisms survive in the same environment; and
 - (B) explain how instinctual behavioral traits such as turtle hatchlings returning to the sea and learned behavioral traits such as orcas hunting in packs increase chances of survival.

ATTACHMENT II
Text of Proposed New 19 TAC

Chapter 112. Texas Essential Knowledge and Skills for Science

Subchapter B. Middle School

§112.25. Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021.

- (a) The provisions of §§112.26-112.28 of this subchapter shall be implemented by school districts.
- (b) No later than July 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for science as adopted in §§112.26-112.28 of this subchapter.
- (c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§112.26-112.28 of this subchapter shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
- (d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than July 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §§112.26-112.28 of this subchapter shall be implemented for the following school year.
- (e) Sections 112.18-112.20 of this subchapter shall be superseded by the implementation of §§112.26-112.28 of this subchapter.

§112.26. Science, Grade 6, Adopted 2021.

- (a) Introduction.
 - (1) In Grades 6 through 8 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 6, the following concepts will be addressed in each strand.
 - (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
 - (B) Matter and energy. Students build upon their knowledge of properties of solids, liquids, and gases and further explore their molecular energies. In Grade 6, students learn how elements are classified as metals, nonmetals, or metalloids based on their properties on the Periodic Table. Students have previous experience with mixtures in Grade 5. Grade 6 furthers their understanding by investigating the different types of mixtures. Subsequent grades will learn about compounds. In Grade 6, students compare the density of substances relative to fluids and identify evidence of chemical changes.

- (C) Force, motion, and energy. Students investigate the relationship between force and motion using a variety of means, including calculations and measurements through the study of Newton's Third Law of Motion. Subsequent grades will study force and motion through Newton's First and Second Laws of Motion. Energy occurs as either potential or kinetic energy. Potential energy can take several forms, including gravitational, elastic, and chemical energy. Energy is conserved throughout systems by changing from one form to another and transfers through waves.
 - (D) Earth and space. Cycles within Sun, Earth, and Moon systems are studied as students learn about seasons and tides. Students identify that the Earth is divided into spheres and examine the processes within and organization of the geosphere. Researching the advantages and disadvantages of short- and long-term uses of resources enables informed decision making about resource management.
 - (E) Organisms and environments. All living organisms are made up of smaller units called cells. Ecosystems are organized into communities, populations, and organisms. Students compare and contrast variations within organisms and how they impact survival. Students examine relationships and interactions between organisms, biotic factors, and abiotic factors in an ecosystem.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.
- (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (b) Knowledge and skills.
- (1) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, and hand lenses;
 - (E) collect quantitative data using the International System of Units (SI) and qualitative data as evidence;
 - (F) construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content;
 - (B) make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used; and

- (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.
- (5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:
- (A) identify and apply patterns to understand and connect scientific phenomena or to design solutions;
- (B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;
- (C) analyze how differences in scale, proportion, or quantity affect a system's structure or performance;
- (D) examine and model the parts of a system and their interdependence in the function of the system;
- (E) analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems;
- (F) analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems; and
- (G) analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems.
- (6) Matter and energy. The student knows that matter is made of atoms, can be classified according to its properties, and can undergo changes. The student is expected to:
- (A) compare solids, liquids, and gases in terms of their structure, shape, volume, and kinetic energy of atoms and molecules;
- (B) investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures;
- (C) classify elements on the periodic table as metals, nonmetals, and metalloids using their physical properties;
- (D) compare the density of substances relative to various fluids; and
- (E) identify the formation of a new substance by using the evidence of a possible chemical change, including production of a gas, change in thermal energy, production of a precipitate, and color change.
- (7) Force, motion, and energy. The student knows the nature of forces and their role in systems that experience stability or change. The student is expected to:
- (A) identify and explain how forces act on objects, including gravity, friction, magnetism, applied forces, and normal forces, using real-world applications;
- (B) calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced; and
- (C) identify simultaneous force pairs that are equal in magnitude and opposite in direction that result from the interactions between objects using Newton's Third Law of Motion.
- (8) Force, motion, and energy. The student knows that the total energy in systems is conserved through energy transfers and transformations. The student is expected to:
- (A) compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy;
- (B) describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis; and

- (C) explain how energy is transferred through transverse and longitudinal waves.
- (9) Earth and space. The student models the cyclical movements of the Sun, Earth, and Moon and describes their effects. The student is expected to:
- (A) model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons; and
- (B) describe and predict how the positions of the Earth, Sun, and Moon cause daily, spring, and neap cycles of ocean tides due to gravitational forces.
- (10) Earth and space. The student understands the rock cycle and the structure of Earth. The student is expected to:
- (A) differentiate between the biosphere, hydrosphere, atmosphere, and geosphere and identify components of each system;
- (B) model and describe the layers of Earth, including the inner core, outer core, mantle, and crust; and
- (C) describe how metamorphic, igneous, and sedimentary rocks form and change through geologic processes in the rock cycle.
- (11) Earth and space. The student understands how resources are managed. The student is expected to research and describe why resource management is important and how conservation, increased efficiency, and technology can help manage air, water, soil, and energy resources.
- (12) Organisms and environments. The student knows that interdependence occurs between living systems and the environment. The student is expected to:
- (A) investigate how organisms and populations in an ecosystem depend on and may compete for biotic factors such as food and abiotic factors such as availability of light and water, range of temperatures, or soil composition;
- (B) describe and give examples of predatory, competitive, and symbiotic relationships between organisms, including mutualism, parasitism, and commensalism; and
- (C) describe the hierarchical organization of organism, population, and community within an ecosystem.
- (13) Organisms and environments. The student knows that organisms have an organizational structure and variations can influence survival of populations. The student is expected to:
- (A) describe the historical development of cell theory and explain how organisms are composed of one or more cells, which come from pre-existing cells and are the basic unit of structure and function;
- (B) identify and compare the basic characteristics of organisms, including prokaryotic and eukaryotic, unicellular and multicellular, and autotrophic and heterotrophic; and
- (C) describe how variations within a population can be an advantage or disadvantage to the survival of a population as environments change.

§112.27. Grade 7, Adopted 2021.

(a) Introduction.

- (1) In Grades 6 through 8 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 7, the following concepts will be addressed in each strand.
- (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method

chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

- (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
 - (B) Matter and energy. Students have prior experience with elements in Grade 6 and develop an understanding that compounds are also pure substances in Grade 7. Students investigate the differences between elements and compounds through observations, descriptions of physical properties, and chemical reactions. Students build upon their understanding of solutions by exploring aqueous solutions.
 - (C) Force, motion, and energy. Students measure, calculate, graph, and investigate how forces impact linear motion. Students build upon their understanding of the laws of motions by exploring Newton's First Law of Motion. Temperature is a measure of the average kinetic energy of molecules. Thermal energy is transferred by conduction, convection, or radiation in order to reach thermal equilibrium.
 - (D) Earth and space. Students explore characteristics and organization of objects and the role of gravity within our solar system. Earth has a specific set of characteristics that allows life to exist. Students further their understanding of the geosphere by illustrating how Earth's features change over time through tectonic movement. Students investigate how humans depend on and affect the hydrosphere.
 - (E) Organisms and environments. Students further their understanding of organisms as systems made up of cells organized into tissues, tissues into organs, and organs into organ systems by identifying the main functions of the organs within the human body. During both sexual and asexual reproduction, traits are passed on to the next generation. Students understand how traits in populations can change through the processes of natural and artificial selection. Students analyze how energy flows through trophic levels and how biodiversity impacts an ecosystem's sustainability. Students gain an understanding of the taxonomic classifications of organisms and how characteristics determine their classification.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (3) Scientific hypotheses and theories. Students are expected to know that:
 - (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be

carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, and hand lenses;

(E) collect quantitative data using the International System of Units (SI) and qualitative data as evidence;

(F) construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content;
 - (B) make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.
- (5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:
- (A) identify and apply patterns to understand and connect scientific phenomena or to design solutions;
 - (B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;
 - (C) analyze how differences in scale, proportion, or quantity affect a system's structure or performance;
 - (D) examine and model the parts of a system and their interdependence in the function of the system;
 - (E) analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems;
 - (F) analyze and explain the complementary relationship between structure and function of objects, organisms, and systems; and
 - (G) analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems.
- (6) Matter and energy. The student distinguishes between elements and compounds, classifies changes in matter, and understands the properties of solutions. The student is expected to:
- (A) compare and contrast elements and compounds in terms of atoms and molecules, chemical symbols, and chemical formulas;
 - (B) distinguish between physical and chemical changes in matter;
 - (C) describe aqueous solutions in terms of solute and solvent, concentration, and dilution; and
 - (D) investigate and model how temperature, surface area, and agitation affect the rate of dissolution of solid solutes in aqueous solutions.
- (7) Force, motion, and energy. The student describes the cause-and-effect relationship between force and motion. The student is expected to:
- (A) calculate average speed using distance and time measurements from investigations;

- (B) distinguish between speed and velocity in linear motion in terms of distance, displacement, and direction;
 - (C) measure, record, and interpret an object's motion using distance-time graphs; and
 - (D) analyze the effect of balanced and unbalanced forces on the state of motion of an object using Newton's First Law of Motion.
- (8) Force, motion, and energy. The student understands the behavior of thermal energy as it flows into and out of systems. The student is expected to:
- (A) investigate methods of thermal energy transfer into and out of systems, including conduction, convection, and radiation;
 - (B) investigate how thermal energy moves in a predictable pattern from warmer to cooler until all substances within the system reach thermal equilibrium; and
 - (C) explain the relationship between temperature and the kinetic energy of the particles within a substance.
- (9) Earth and space. The student understands the patterns of movement, organization, and characteristics of components of our solar system. The student is expected to:
- (A) describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, comets, Kuiper belt, and Oort cloud;
 - (B) describe how gravity governs motion within Earth's solar system; and
 - (C) analyze the characteristics of Earth that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere.
- (10) Earth and space. The student understands the causes and effects of plate tectonics. The student is expected to:
- (A) describe the evidence that supports that Earth has changed over time, including fossil evidence, plate tectonics, and superposition; and
 - (B) describe how plate tectonics causes ocean basin formation, earthquakes, mountain building, and volcanic eruptions, including supervolcanoes and hot spots.
- (11) Earth and space. The student understands how human activity can impact the hydrosphere. The student is expected to:
- (A) analyze the beneficial and harmful influences of human activity on groundwater and surface water in a watershed; and
 - (B) describe human dependence and influence on ocean systems and explain how human activities impact these systems.
- (12) Organisms and environments. The student understands that ecosystems are dependent upon the cycling of matter and the flow of energy. The student is expected to:
- (A) diagram the flow of energy within trophic levels and describe how the available energy decreases in successive trophic levels in energy pyramids; and
 - (B) describe how ecosystems are sustained by the continuous flow of energy and the recycling of matter and nutrients within the biosphere.
- (13) Organisms and environments. The student knows how systems are organized and function to support the health of an organism and how traits are inherited. The student is expected to:
- (A) identify and model the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, urinary, reproductive, integumentary, nervous, immune, and endocrine systems;

- (B) describe the hierarchical organization of cells, tissues, organs, and organ systems within plants and animals;
 - (C) compare the results of asexual and sexual reproduction of plants and animals in relation to the diversity of offspring and the changes in the population over time; and
 - (D) describe and give examples of how natural and artificial selection change the occurrence of traits in a population over generations.
- (14) Organisms and environments. The student knows how the taxonomic system is used to describe relationships between organisms. The student is expected to:
- (A) describe the taxonomic system that categorizes organisms based on similarities and differences shared among groups; and
 - (B) describe the characteristics of the recognized kingdoms and their importance in ecosystems such as bacteria aiding digestion or fungi decomposing organic matter.

§112.28. Grade 8, Adopted 2021.

(a) Introduction.

- (1) In Grades 6 through 8 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 8, the following concepts will be addressed in each strand.
- (A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.
 - (B) Matter and energy. Students make connections between elements, compounds, and mixtures that were introduced in prior grade levels. Students examine the properties of water, acids, and bases. In addition, students understand the basic concept of conservation of mass using chemical equations.
 - (C) Force, motion, and energy. Students are introduced to Newton's Second Law of Motion and investigate how all three laws of motion act simultaneously within systems. Students understand that waves transfer energy and further explore the characteristics and applications of waves.
 - (D) Earth and space. Students learn that stars and galaxies are part of the universe. In addition, students use data to research scientific theories of the origin of the universe. Students learn how interactions in solar, weather, and ocean systems create changes in weather patterns and climate. In addition, students understand that climate can be impacted by natural events and human activities.
 - (E) Organisms and environments. Students identify the function of organelles. Traits are contained in genetic material that is found on genes within a chromosome from the parent. These traits influence the success of a species over time. Students explore how

organisms and their populations respond to environmental changes, including those caused by human activities.

- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
 - (3) Scientific hypotheses and theories. Students are expected to know that:
 - (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
 - (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.
 - (5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
 - (6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (b) Knowledge and skills.
- (1) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, weather maps, and hand lenses;
 - (E) collect quantitative data using the International System of Units (SI) and qualitative data as evidence;

- (F) construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content;
 - (B) make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.
- (5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:
- (A) identify and apply patterns to understand and connect scientific phenomena or to design solutions;
 - (B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;
 - (C) analyze how differences in scale, proportion, or quantity affect a system's structure or performance;
 - (D) examine and model the parts of a system and their interdependence in the function of the system;
 - (E) analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems;

- (F) analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems; and
- (G) analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems.
- (6) Matter and energy. The student understands that matter can be classified according to its properties and matter is conserved in chemical changes that occur within closed systems. The student is expected to:
 - (A) explain by modeling how matter is classified as elements, compounds, homogeneous mixtures, or heterogeneous mixtures;
 - (B) describe the properties of cohesion, adhesion, and surface tension in water and relate to observable phenomena such as the formation of droplets, transport in plants, and insects walking on water;
 - (C) compare and contrast the properties of acids and bases, including pH relative to water, sour or bitter taste, and how these substances feel to the touch; and
 - (D) investigate how mass is conserved in chemical reactions and relate conservation of mass to the rearrangement of atoms using chemical equations, including photosynthesis.
- (7) Force, motion, and energy. The student understands the relationship between force and motion within systems. The student is expected to:
 - (A) calculate and analyze how the acceleration of an object is dependent upon the net force acting on the object and the mass of the object using Newton's Second Law of Motion; and
 - (B) investigate and describe how Newton's three laws of motion act simultaneously within systems such as in vehicle restraints, sports activities, amusement park rides, Earth's tectonic activities, and rocket launches.
- (8) Force, motion, and energy. The student knows how energy is transferred through waves. The student is expected to:
 - (A) compare the characteristics of amplitude, frequency, and wavelength in transverse waves, including the electromagnetic spectrum; and
 - (B) explain the use of electromagnetic waves in applications such as radiation therapy, wireless technologies, fiber optics, microwaves, ultraviolet sterilization, astronomical observations, and X-rays.
- (9) Earth and space. The student describes the characteristics of the universe and the relative scale of its components. The student is expected to:
 - (A) describe the life cycle of stars and compare and classify stars using the Hertzsprung-Russell diagram;
 - (B) categorize galaxies as spiral, elliptical, and irregular and locate Earth's solar system within the Milky Way galaxy; and
 - (C) research and analyze scientific data used as evidence to develop scientific theories that describe the origin of the universe.
- (10) Earth and space. The student knows that interactions between Earth, ocean, and weather systems impact climate. The student is expected to:
 - (A) describe how energy from the Sun, hydrosphere, and atmosphere interact and influence weather and climate;
 - (B) identify global patterns of atmospheric movement and how they influence local weather; and

- (C) describe the interactions between ocean currents and air masses that produce tropical cyclones, including typhoons and hurricanes.
- (11) Earth and space. The student knows that natural events and human activity can impact global climate. The student is expected to:
- (A) use scientific evidence to describe how natural events, including volcanic eruptions, meteor impacts, abrupt changes in ocean currents, and the release and absorption of greenhouse gases influence climate;
 - (B) use scientific evidence to describe how human activities such as the release of greenhouse gases, deforestation, and urbanization can influence climate; and
 - (C) describe efforts to mitigate climate change, including a reduction in greenhouse gas emissions.
- (12) Organisms and environments. The student understands stability and change in populations and ecosystems. The student is expected to:
- (A) explain how disruptions such as population changes, natural disasters, and human intervention impact the transfer of energy in food webs in ecosystems;
 - (B) describe how primary and secondary ecological succession affect populations and species diversity after ecosystems are disrupted by natural events or human activity; and
 - (C) describe how biodiversity contributes to the stability and sustainability of an ecosystem and the health of the organisms within the ecosystem.
- (13) Organisms and environments. The student knows how cell functions support the health of an organism and how adaptation and variation relate to survival. The student is expected to:
- (A) identify the function of the cell membrane, cell wall, nucleus, ribosomes, cytoplasm, mitochondria, chloroplasts, and vacuoles in plant or animal cells;
 - (B) describe the function of genes within chromosomes in determining inherited traits of offspring; and
 - (C) describe how variations of traits within a population lead to structural, behavioral, and physiological adaptations that influence the likelihood of survival and reproductive success of a species over generations.

**Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training; Subchapter I, Health Science; Subchapter J, Hospitality and Tourism; Subchapter M, Law and Public Service; and Subchapter O, Science, Technology, Engineering, and Mathematics
(Second Reading and Final Adoption)**

November 19, 2021

COMMITTEE OF THE FULL BOARD: ACTION
STATE BOARD OF EDUCATION: ACTION

SUMMARY: This item presents for second reading and final adoption proposed new 19 Texas Administrative Code (TAC) Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.416-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.651 and §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787. The proposed new rules would update the standards to ensure the standards remain current and better support the revised career and technical education (CTE) programs of study. Changes are recommended since approved for first reading.

STATUTORY AUTHORITY: Texas Education Code (TEC), §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2), and (b-17).

TEC, §7.102(c)(4), requires the State Board of Education (SBOE) to establish curriculum and graduation requirements.

TEC, §28.002(a), identifies the subjects of the required curriculum.

TEC, §28.002(c), requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments.

TEC, §28.002(n), allows the SBOE to by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the CTE curriculum required in TEC, §28.002.

TEC, §28.002(o), requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement.

TEC, §28.025(a), requires the SBOE by rule to determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002.

TEC, §28.025(b-2), requires the SBOE by rule to allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under TEC, §28.025(b-1)(2), or the third and fourth science credits under TEC, §28.025(b-1)(3), by successfully completing a CTE course designated by the SBOE as containing substantially similar and rigorous content.

TEC, §28.025(b-17), requires the SBOE by rule to ensure that a student may comply with curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

The full text of statutory citations can be found in the statutory authority section of this agenda.

EFFECTIVE DATE: The proposed effective date of the proposed new sections is 20 days after filing as adopted with the Texas Register. Under TEC, §7.102(f), the SBOE must approve the rule action at second reading and final adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2022-2023 school year. The earlier effective date will enable districts to begin preparing for implementation of the revised CTE Texas Essential Knowledge and Skills (TEKS).

PREVIOUS BOARD ACTION: The SBOE adopted the TEKS for CTE, including career development, effective September 1, 1998. The CTE TEKS were amended effective August 23, 2010. In April 2015 and July 2015, the board approved for second reading and final adoption proposed revisions to the CTE TEKS. At the September 2015 meeting, the board approved for second reading and final adoption proposed new CTE TEKS for an Advanced Marketing course and second-level practicum and automotive technology courses. The revised CTE TEKS were implemented at the start of the 2017-2018 school year.

The SBOE approved proposed revisions to 19 TAC Chapter 130, Subchapters B, H, J, M, and O, for second reading and final adoption at the January-February 2018 meeting. The revised CTE courses were implemented at the start of the 2018-2019 school year.

At the September 2021 SBOE meeting, the board approved for first reading and filing authorization proposed new Chapter 127, Subchapters G, I, J, M, and O.

BACKGROUND INFORMATION AND JUSTIFICATION: In accordance with statutory requirements that the SBOE by rule identify the essential knowledge and skills of each subject in the required curriculum, the SBOE follows a board-approved cycle to review and revise the essential knowledge and skills for each subject.

At the January 2021 meeting, the board held a work session to discuss the timeline for the TEKS review and revision process and associated activities, including updates to State Board for Educator Certification teacher assignment rules and certification exams, adoption of instructional materials, and the completion of the Texas Resource Review. Texas Education Agency (TEA) staff provided an overview of CTE programs of study and a skills gap analysis that is being completed to inform review and revision of the CTE TEKS.

Also, during the January 2021 meeting, staff provided an update on plans for the review and revision of CTE courses that satisfy a science graduation requirement as well as certain courses in the health science, education and training, and science, technology, engineering, and mathematics (STEM) programs of study. Applications to serve on these CTE TEKS review work groups were posted on the TEA website in December 2020. TEA staff provided SBOE members applications for approval to serve on a CTE work group at the January 2021 SBOE meeting. Additional applications were provided to SBOE members in February and March 2021. Work groups were convened from March-July 2021 to develop recommendations for the CTE courses. At the June 2021 SBOE meeting, a discussion item for proposed new 19 TAC Chapter 130 was presented to the board.

Currently, CTE courses are codified in 19 TAC Chapter 130. Due to the current structure of 19 TAC Chapter 130, there are not enough section numbers available in Chapter 130 to add all of the proposed new courses in their assigned subchapters. To accommodate the addition of these new courses and future courses, it is recommended that the CTE TEKS in Chapter 130 be moved to existing 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, and that the chapter be renamed "Texas Essential Knowledge and Skills for Career Development and Career and Technical Education."

The move of CTE subchapters from Chapter 130 to Chapter 127 will take place over time as the TEKS in each subchapter are revised.

The proposal recommends that the new CTE TEKS be implemented over the course of three school years from 2022-2023 to 2024-2025 in order to allow sufficient time for districts to prepare for the implementation of new standards and for the development of instructional materials and other resources.

In order to avoid confusion regarding the year of implementation, it is recommended that specific implementation language be added at adoption to each course and that the separate implementation sections be withdrawn as proposed. Therefore, Attachments I-V of this item reflect updated implementation language in each section. Section 127.416 and §127.651, which contain implementation language for Subchapters I and M, are recommended for withdrawal.

In addition, at the September 2021 SBOE meeting, the board approved a recommendation to remove four new computer science courses from consideration for first reading and filing authorization. The courses would have been included in new Chapter 127, Subchapter O. However, the four new courses were inadvertently filed as proposed with the Texas Register and published as proposed new §§127.788-127.791. In order to address the error, the SBOE must approve withdrawal of the four courses. The board will have the opportunity to consider for first reading and filing authorization the four new computer science courses at the January 2022 SBOE meeting.

FISCAL IMPACT: No changes have been made to this section since published as proposed.

TEA has determined that for the first five years the proposal is in effect (2022-2026), there are no fiscal implications to the state. However, there will be implications for TEA if the state develops professional development to help teachers and administrators understand the revised TEKS. Any professional development that is created would be based on whether TEA received an appropriation for professional development in the next biennium.

There may be fiscal implications for school districts and charter schools to implement the proposed revisions to the TEKS, which may include the need for professional development and revisions to district-developed databases, curriculum, and scope and sequence documents. Since curriculum and instruction decisions are made at the local district level, it is difficult to estimate the fiscal impact on any given district.

LOCAL EMPLOYMENT IMPACT: No changes have been made to this section since published as proposed.

The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: No changes have been made to this section since published as proposed.

The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: No changes have been made to this section since published as proposed.

The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: No changes have been made to this section since published as proposed.

The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: No changes have been made to this section since published as proposed.

TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would create new regulations by proposing revised CTE TEKS required to be offered by school districts and charter schools.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand, limit, or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: No changes have been made to this section since published as proposed.

The proposal would better align the TEKS and coordinate the standards with the adoption of instructional materials. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: No changes have been made to this section since published as proposed.

The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: No changes have been made to this section since published as proposed.

TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: Following the September 2021 SBOE meeting, notice of proposed new 19 TAC Chapter 127, Subchapters G, I, J, M, and O, was filed with the Texas Register, initiating the public comment period. The public comment period began October 8, 2021, and ended at 5:00 p.m. on November 12, 2021. No comments had been received at the time this item was prepared. A summary of public comments received will be provided to the SBOE prior to and during the November 2021 meeting. The SBOE will take registered oral and written comments on the proposal at the appropriate committee meeting in November 2021 in accordance with the SBOE board operating policies and procedures.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve for second reading and final adoption proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.417-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787; and

Approve the withdrawal of proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter I, Health Science, §127.416, Implementation of Texas Essential Knowledge and Skills for Health Science, Adopted 2021; Subchapter M, Law and Public Service, §127.651, Implementation of Texas Essential Knowledge and Skills for Law and Public Service, Adopted 2021; and Subchapter O, Science, Technology, Engineering, and Mathematics, §127.788, Fundamentals of Computer Science (One Credit), Adopted 2021, §127.789, Computer Science I (One Credit), Adopted 2021, §127.790, Computer Science II (One Credit), Adopted 2021, and §127.791, Computer Science III (One Credit), Adopted 2021; and

Make an affirmative finding that immediate adoption of the proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.417-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register. (*Per TEC, §7.102(f), a vote of two-thirds of the members of the board is necessary for an earlier effective date.*)

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Attachment I:

Text of Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training

Attachment II:

Text of Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter I, Health Science

Attachment III:

Text of Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter J, Hospitality and Tourism

Attachment IV:

Text of Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter M, Law and Public Service

Attachment V:

Text of Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter O, Science, Technology, Engineering, and Mathematics

ATTACHMENT I
Text of Proposed New 19 TAC

Chapter 127. Texas Essential Knowledge and Skills for Career Development and Career and Technical Education

Subchapter G. Education and Training

§127.316. Principles of Education and Training (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
- (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
 - (3) Principles of Education and Training is designed to introduce learners to the various careers within the Education and Training Career Cluster. Students use self-knowledge as well as educational and career information to analyze various careers within the Education and Training Career Cluster. Students are introduced to societal influences of education and various school models. Additionally, students learn the role and responsibilities of a classroom educator. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills required by the education profession and related occupations. The student is expected to:
 - (A) demonstrate written communication skills;
 - (B) perform job-appropriate numerical and arithmetic applications;

- (C) practice various forms of communication such as verbal and non-verbal communication used in educational and career settings;
 - (D) exhibit teamwork skills;
 - (E) analyze the impact of current decision making on short- and long-term career plans;
 - (F) identify and implement problem-solving techniques;
 - (G) identify conflict-management skills;
 - (H) describe effective leadership skills;
 - (I) describe productive work habits such as being organized, managing time, and taking initiative;
 - (J) demonstrate professionalism, including appropriate attire expected of professionals in educational settings; and
 - (K) identify effective work ethic practices.
- (2) The student identifies strategies that promote health and wellness to address the unique challenges of educators in balancing work and personal responsibilities. The student is expected to:
- (A) explain common signs of stress and anxiety;
 - (B) describe appropriate boundaries for a healthy work-life balance;
 - (C) discuss the impacts of an education career on personal lifestyle such as impacts on time, earning potential, community presence and involvement, health and wellness, and family;
 - (D) describe appropriate boundaries for a healthy work-life balance; and
 - (E) discuss strategies to manage health and wellness.
- (3) The student recognizes the impact of social media and web-based applications on the education process. The student is expected to:
- (A) demonstrate appropriate use of social media for educational purposes; and
 - (B) identify web-based resources that can be used in the education process.
- (4) The student investigates the range of employment opportunities in the education and training field. The student is expected to:
- (A) identify and investigate career opportunities in education and training;
 - (B) investigate additional occupations in education and training such as professional support services, administration, county extension agent, and corporate trainer;
 - (C) compare transferable skills among a variety of careers in education and; and
 - (D) analyze results from personal assessments such as how results from career interest and ability inventories relate to skills necessary for success in education and training occupations.
- (5) The student explains societal impacts on the education and training field. The student is expected to:
- (A) investigate trends or issues that have influenced the development of education across the United States such as historical, societal, cultural, and political trends and issues;
 - (B) explain pedagogy and andragogy theory;
 - (C) predict the education and training job market using information from sources such as labor market information, technology, and societal or economic trends; and
 - (D) summarize the role of family/caregiver in education.

- (6) The student describes the characteristics of different educational and training environments. The student is expected to:
- (A) summarize the various roles and responsibilities of professionals in teaching and training and early learning, including demonstrating ethical behavior in educational settings;
 - (B) describe different types of schools such as academies and Montessori, public, private, charter, and magnet schools and schools in urban and rural areas;
 - (C) compare teacher salary schedules among different school models such as public, private, and charter schools within rural and urban areas of the state;
 - (D) discuss factors, including stipends, state and school district initiatives, and level of education, that can impact earning potential; and
 - (E) identify various sources for information related to education careers such as requirements to become a teacher, curriculum standards, and the structures and roles of state and federal governing bodies in education.
- (7) The student experiences authentic education and training opportunities. The student is expected to:
- (A) observe educator duties and responsibilities through activities such as assisting, shadowing, or observing;
 - (B) develop and evaluate instructional materials such as visuals, teacher aids, manipulatives, lessons, and lesson plans;
 - (C) define lesson plan components, including objectives, direct instruction, guided practice, independent practice, and formative and summative assessments;
 - (D) identify and discuss methods to adapt lessons to meet student needs; and
 - (E) identify a personal set of beliefs related to education in preparation for developing a philosophy of education.
- (8) The student identifies elements of an effective classroom environment. The student is expected to:
- (A) use available classroom equipment and technology for effective instruction;
 - (B) analyze effective tools used in classroom management such as classroom expectations, seating charts, classroom set-up, procedures and routines, and teacher organization and preparation; and
 - (C) explain characteristics of an effective learning environment, including universally accessible classroom design.
- (9) The student analyzes the education and training requirements for a career in an area of interest. The student is expected to:
- (A) investigate degree plans or training alternatives for various occupations within teaching and training and early learning;
 - (B) develop a graduation plan that leads to a specific career choice in the area of interest;
 - (C) investigate and identify high school and dual enrollment opportunities related to education and training careers;
 - (D) investigate and identify scholarships, grants, and financial incentives related to interest areas in education and training;
 - (E) identify and compare technical and community college programs that align with interest areas in education and training; and
 - (F) identify and compare university programs and institutions that align with interest areas in education and training.

- (10) The student documents technical knowledge and skills related to education and training. The student is expected to:
- (A) assemble basic professional portfolio components such as basic resume, samples of work, service-learning logs, assessment results, and mock scholarship applications; and
 - (B) present a portfolio to interested stakeholders such as teachers, school administrators, career and technical education administrators, curriculum specialists, or human resources personnel.
- (11) The student understands how classroom observations (video or in person) inform and improve instruction. The student is expected to:
- (A) apply knowledge gained in the course to conduct targeted observations;
 - (B) record objective observations of student behavior and teacher interactions;
 - (C) explain how observations can influence philosophy of education and delivery of instruction; and
 - (D) identify qualities of an effective classroom through classroom observation.

§127.319. Child Development Associate Foundations (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
- (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grade 10 but open for students through Grade 12. Recommended prerequisites: Principles of Education and Training or Principles of Human Services. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
 - (3) The Child Development Associate Foundations course is a laboratory course addressing the knowledge and skills related to applying Child Development Associate Competency Standards in early childhood environments and understanding how these competencies help young children move with success from one developmental stage to the next.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student identifies professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate effective written communication;
 - (B) practice various forms of communication such as verbal and non-verbal communication skills used in education and career settings;
 - (C) apply decision-making skills;
 - (D) identify and exhibit characteristics of professionalism; and
 - (E) develop effective work ethic practices.
- (2) The student understands the need for establishing a safe, healthy learning environment for young children. The student is expected to:
 - (A) describe a safe physical setting for an indoor classroom environment;
 - (B) describe a safe physical setting for an outdoor play environment;
 - (C) compare and contrast the learning environments for childcare settings such as preschool, infant-toddler, family childcare, and home visitor environments;
 - (D) identify practices that promote health and prevent illness in an early childhood classroom; and
 - (E) identify components of a learning environment that promotes engagement, play, exploration, and learning of all children, including children with special needs.
- (3) The student recognizes the importance of advancing each child's physical and intellectual competence in the early childhood classroom through a variety of developmentally appropriate equipment, learning experiences, and teaching strategies. The student is expected to:
 - (A) analyze the methods for promoting physical development in young children;
 - (B) investigate strategies for promoting cognitive development in young children;
 - (C) investigate techniques for promoting language and early literacy in young children, including dual-language learners; and
 - (D) investigate and explain reasons for promoting creative expression and creative abilities in young children.
- (4) The student analyzes social and emotional development in young children. The student is expected to:
 - (A) summarize the value of developing a warm, positive, supportive, and responsive relationship with each child;
 - (B) explain the value of helping each child learn about and take pride in the child's individual and cultural identity; and
 - (C) research and explain the significance of helping each child function effectively in a group setting, express feelings, and acquire social skills.
- (5) The student discusses the need for providing positive guidance in an early childhood classroom. The student is expected to:
 - (A) summarize the importance of a classroom management plan;
 - (B) explain the importance of positively addressing challenging behaviors; and

- (C) compare various positive guidance techniques.
- (6) The student describes the benefits of objective observations and assessments of young children in the early childhood classroom. The student is expected to:
 - (A) investigate and compare various observation tools and strategies;
 - (B) analyze how observations impact curriculum planning and individualized teaching; and
 - (C) describe how objective observations are used to build productive relationships with families.
- (7) The student examines the importance of positive and productive relationships with families of young children. The student is expected to:
 - (A) investigate and describe different family structures;
 - (B) describe ways to establish partnerships with families; and
 - (C) describe methods for effectively communicating with families.
- (8) The student analyzes the components of operating an effective, professional early childhood program. The student is expected to:
 - (A) discuss the importance of establishing and maintaining professional relationships within an early childhood program;
 - (B) research various techniques for navigating disagreements or conflicts between personnel of an early childhood program;
 - (C) investigate the qualities of teaching with intentionality; and
 - (D) explain the importance of advocating for early childhood education.
- (9) The student documents technical knowledge and skills. The student is expected to:
 - (A) assemble professional portfolio components such as a resume, samples of learning experiences, service-learning log, and assessment results; and
 - (B) present the portfolio to interested stakeholders such as industry professionals, parents, community members, campus teachers and administrators, and peers.

§127.320. Practicum in Early Learning (Two Credits), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
 - (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grade 12. Prerequisite: Child Guidance. Recommended prerequisites: Child Development or Child Development Associate Foundations. Students shall be awarded two credits for successful completion of this course. A student may repeat this course

once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

(c) ~~(b)~~ Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
- (3) Practicum in Early Learning is a field-based course that provides students background knowledge of early childhood development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher facilitator and an exemplary industry professional. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of early learning teachers, trainers, paraprofessionals, or other educational personnel.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(c)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate advanced written communication skills;
 - (B) perform job-appropriate mathematical applications;
 - (C) demonstrate appropriate forms of communication such as verbal and non-verbal communication used in educational and career settings;
 - (D) promote and exhibit teamwork skills;
 - (E) analyze and apply decision-making skills;
 - (F) implement problem-solving techniques effectively;
 - (G) analyze and demonstrate conflict-management skills;
 - (H) assess personal leadership skills;
 - (I) describe and demonstrate professionalism, including time-management skills; and
 - (J) analyze and demonstrate effective work ethic practices.
- (2) The student explores the early childhood education profession. The student is expected to:
 - (A) analyze current trends and issues that impact early childhood education such as political, societal, and economic trends and issues;
 - (B) analyze qualities of effective early childhood education professionals and programs;
 - (C) develop a written summary of professional beliefs and values about early childhood education, how young children learn, and the role of an early educator;
 - (D) explore the educational/academic requirements and possible degrees/certifications available in early childhood education;
 - (E) develop and refine a personal career plan in preparation for a career in the field of early childhood development or education;

- (F) explore and identify early childhood development or education opportunities in non-traditional settings such as those in corporations, community outreach programs, nonprofits, and government entities; and
 - (G) explore educational high-needs and teacher-specialty areas such as special education and bilingual and English as a second language education programs.
- (3) The student understands the learner and learning process. The student is expected to:
- (A) apply principles and theories of human development appropriate to early learning situations and reflect on the application thereof;
 - (B) apply principles and theories about the learning process to specific early learning situations and reflect on the application thereof;
 - (C) analyze the dynamics of educator and student behaviors that facilitate the early learning process;
 - (D) analyze teaching skills that facilitate the early learning process and document field-learning experiences; and
 - (E) demonstrate and evaluate effective instructional practices to accommodate diversity such as learning differences, learner exceptionality, and special-needs considerations.
- (4) The student plans and implements effective instruction. The student is expected to:
- (A) demonstrate and evaluate techniques promoting early childhood growth and development skills such as language, literacy, numeracy, motor learning, and cross-disciplinary content areas;
 - (B) develop age-appropriate lesson plans and instructional materials that align to student learning goals;
 - (C) evaluate the effectiveness of lesson plans and instructional strategies; and
 - (D) explain how learner and professional feedback is used to guide selection and adjustment of instructional strategies.
- (5) The student creates and maintains an effective learning environment. The student is expected to:
- (A) create and maintain a safe and an effective learning environment;
 - (B) integrate teacher or trainer practices that promote an effective learning environment;
 - (C) apply classroom management techniques that promote an effective learning environment; and
 - (D) demonstrate specific conflict-management and mediation techniques supportive of an effective learning environment.
- (6) The student assesses instruction and learning. The student is expected to:
- (A) develop and apply formal and informal assessments to track and monitor student learning and progress; and
 - (B) analyze assessment data to inform and modify instruction.
- (7) The student understands the relationship between school, families, and community in early learning. The student is expected to:
- (A) select family services and school and community resources to promote student growth;
 - (B) promote learning and build support through positive school partnership activities with stakeholders such as families, schools, communities, and business/industry; and
 - (C) collaborate with professional early learning community members to meet the needs of students and families.

- (8) The student develops technology skills. The student is expected to:
- (A) utilize current technology applications that are age-appropriate for specific student learning needs, including for early learners with special needs; and
 - (B) integrate the skillful use of technology as a tool for instruction, evaluation, communication, and management.
- (9) The student understands the professional, ethical, and legal responsibilities of early childhood professionals. The student is expected to:
- (A) demonstrate and evaluate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals;
 - (B) analyze professional and ethical standards that apply to early childhood professionals; and
 - (C) analyze situations requiring decisions based on professional, ethical, and legal considerations.
- (10) The student explores the need and opportunities for continued professional development for early education professionals. The student is expected to:
- (A) identify strategies and resources for the professional development of early education professionals such as research and assessment; and
 - (B) create a plan for professional career growth, including short-term and long-term goals.
- (11) The student understands facility operations, including nutrition, program management, and safety guidelines. The student is expected to:
- (A) explain the importance of accurate record maintenance such as personnel, student, incident, and facility documentation;
 - (B) create a meal plan that promotes good nutrition and wellness;
 - (C) explain the importance of allocation of facility resources and budget management; and
 - (D) explain the importance of safety procedures and regulations.
- (12) The student continues to participate in field-based experiences in early childhood settings. The student is expected to:
- (A) apply instructional strategies and concepts within a local educational or training facility; and
 - (B) document, assess, and reflect on instructional experiences.
- (13) The student documents technical knowledge and skills. The student is expected to:
- (A) gather artifacts and documentation that support attainment of technical skill competencies;
 - (B) update a professional portfolio to include components such as a resume, samples of work, service-learning log, recognitions, awards, scholarship essays, letters of recommendation, certifications, evaluations, and Child Development Associate (CDA) requirements; and
 - (C) present a portfolio to interested stakeholders.

§127.321. Extended Practicum in Early Learning (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
- (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.

- (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
- (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grade 12. Required prerequisite: Child Guidance. Recommended prerequisites: Child Development or Child Development Associate Foundations. Corequisite: Practicum in Early Learning. This course must be taken concurrently with Practicum in Early Learning and may not be taken as a stand-alone course. Students shall be awarded one credit for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
- (3) Extended Practicum in Early Learning is a field-based internship that provides students background knowledge of early childhood development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher facilitator and an exemplary industry professional. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of early learning teachers, trainers, paraprofessionals, or other educational personnel.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
- (A) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to early childhood education professions;
- (B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;
- (C) demonstrate professional standards and personal qualities needed to be employable such as leadership, appreciation of diversity, conflict-management, work ethic, and adaptability with increased fluency;
- (D) demonstrate technology applications skills such as effective use of social media, email, internet, publishing tools, presentation tools, spreadsheets, or databases with increased fluency to enhance work products; and
- (E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks.

- (2) The student applies professional communications strategies. The student is expected to:
 - (A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;
 - (B) present information formally and informally;
 - (C) analyze, interpret, and communicate information; and
 - (D) apply active listening skills to obtain and clarify information.
- (3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.
- (4) The student understands the professional, ethical, and legal responsibilities in early childhood education professions. The student is expected to:
 - (A) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (B) show integrity by choosing the ethical course of action when making decisions;
 - (C) demonstrate proper etiquette and knowledge of acceptable-use policies when using networks, especially resources on the internet and intranet; and
 - (D) comply with all applicable rules, laws, and regulations in a consistent manner.
- (5) The student continues to participate in field-based experiences in early childhood education and education and training professions. The student is expected to:
 - (A) apply instructional strategies and concepts with increased fluency within a local educational or training facility;
 - (B) apply principles and theories that impact instructional planning;
 - (C) develop curriculum and related materials to support instruction that aligns with current child development industry standards;
 - (D) demonstrate competency in foundation and enrichment subject areas;
 - (E) create lesson plans that meet instructional goals;
 - (F) document, assess, and reflect on instructional experiences; and
 - (G) collect representative work samples.

§127.324. Communication and Technology in Education (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
 - (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection (a), the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.

(b) [(a)] General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Education and Training. Students shall be awarded one credit for successful completion of this course.

(c) [(b)] Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
- (3) Communication and Technology in Education is an extended course of study designed to provide students with the fundamentals of planning, managing, and training services needed to provide learning support services in Kindergarten-Grade 12 classrooms. Students will develop knowledge and skills regarding the professional, ethical, and legal responsibilities in teaching related to educational technology; students will also understand laws and pedagogical justifications regarding classroom technology use. Students will develop knowledge of developmentally appropriate practice for age level when technology is used by learners. This course provides an opportunity for students to participate in training related to standards set by the International Society for Technology in Education.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) [(c)] Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate written communication skills;
 - (B) perform job-appropriate numerical and arithmetic application;
 - (C) practice various forms of communication such as verbal and non-verbal communication skills used in educational and career settings;
 - (D) exhibit teamwork skills;
 - (E) apply decision-making skills;
 - (F) identify and implement problem-solving techniques;
 - (G) describe conflict-management skills;
 - (H) describe and demonstrate professionalism;
 - (I) describe effective work ethic practices;
 - (J) demonstrate appreciation for diversity;
 - (K) participate in training, education, or certification for employment;
 - (L) demonstrate skills related to seeking and applying for employment; and
 - (M) create a resume and cover letter to document information such as work experience, licenses, certifications, and work samples.
- (2) The student understands the professional, ethical, and legal responsibilities when communicating in the educational field. The student is expected to:
 - (A) apply communication standards that promote professional, ethical, and legal conduct;

- (B) identify times when communication between school and parents/community is necessary;
 - (C) distinguish between appropriate and inappropriate uses of social media and other communication platforms and methods; and
 - (D) cite sanctions and consequences for educator misconduct such as those stemming from inappropriate relationships.
- (3) The student understands multiple forms of communication necessary for effective teaching. The student is expected to:
- (A) demonstrate effective verbal communication skills with various stakeholders such as students, educators, parents/guardians, community members, and other professionals;
 - (B) demonstrate active listening skills to obtain and clarify information;
 - (C) identify various forms of digital communication for educators such as email, blogs, wikis, podcasts, vlogs, digital streaming, infographics, digital portfolios, or social media;
 - (D) construct effective and professional electronic communication with parents and stakeholders such as newsletters, emails, and websites;
 - (E) demonstrate effective professional collaboration and communication such as participation in professional learning communities, peer-coaching, and mentoring;
 - (F) demonstrate effective student-teacher communication such as assignment feedback and one-on-one interaction;
 - (G) facilitate effective student group work and multiple strategies for student engagement; and
 - (H) differentiate between approaches to communication based on student needs, including considerations for special populations and nonverbal communication.
- (4) The student applies digital literacy concepts to communication with students and stakeholders. The student is expected to:
- (A) apply digital literacy practices in communications to students and stakeholders such as desktop publishing, elements of art and design, and design thinking;
 - (B) demonstrate appropriate search strategies for finding resources on the internet such as Boolean searches;
 - (C) compare various digital media technologies such as digital books, databases, websites, interactive games, and digital videos; and
 - (D) evaluate and select appropriate software for specific purposes such as communication and research.
- (5) The student evaluates technology and applications for classroom use. The student is expected to:
- (A) demonstrate understanding of laws regarding classroom technology use such as Family Educational Rights and Privacy Act (FERPA), Children's Online Privacy Protection Act (COPPA), end-user license agreements (EULAs), and age restrictions;
 - (B) apply laws related to the legal use of electronic materials such as copyright, fair use, public domain, and open source;
 - (C) evaluate usage of classroom technology using a model such as substitution augmentation modification redefinition (SAMR) and technological pedagogical content knowledge (TPaCK);
 - (D) describe methods for approval of technology use in the district such as inventorying, licensing, and budgeting; and

- (E) identify classroom management strategies appropriate for technology use in the classroom.
- (6) The student creates engaging lessons and lesson plans incorporating technology. The student is expected to:
 - (A) analyze the relationship between technology and student engagement in the classroom;
 - (B) design learning experiences that incorporate 21st century learning skills such as creativity, collaboration, critical thinking, communication, and resiliency;
 - (C) create lessons using different types of technology such as presentation software, spreadsheet software, image editing software, video creation software, polling software, and word processing software;
 - (D) apply technology to assess student learning at the beginning of, during, and at the end of a lesson;
 - (E) design authentic learning experiences that align with content-area Texas Essential Knowledge and Skills and use technology to maximize active, deep learning across grade levels to show appropriate use based on age;
 - (F) create an interactive lesson that utilizes appropriate technology; and
 - (G) create a differentiated lesson that incorporates the appropriate use of technology.

§127.325. Instructional Practices (Two Credits), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
 - (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisites: Principles of Education and Training, Human Growth and Development, or Child Development. Students shall be awarded two credits for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
 - (3) Instructional Practices is a field-based (practicum) course that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high

school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and perform other duties of teachers, trainers, paraprofessionals, or other educational personnel.

- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by the education profession and other related occupations. The student is expected to:
 - (A) demonstrate written communication;
 - (B) perform job-appropriate numerical and arithmetic application;
 - (C) practice various forms of communication such as verbal and non-verbal communication skills and appropriate uses of social media in educational and career settings;
 - (D) exhibit teamwork skills;
 - (E) apply decision-making skills;
 - (F) implement problem-solving techniques;
 - (G) acquire conflict-management skills;
 - (H) develop leadership skills;
 - (I) demonstrate professionalism to include appropriate attire expected of professionals in educational settings; and
 - (J) develop effective work ethic practices.
- (2) The student identifies strategies that promote health and wellness by balancing the unique challenges of being an educator with personal responsibilities. The student is expected to:
 - (A) identify signs of personal stress and anxiety;
 - (B) choose appropriate boundaries for a healthy work-life balance; and
 - (C) implement strategies to manage health and wellness.
- (3) The student explores the teaching and training profession. The student is expected to:
 - (A) demonstrate an understanding of the historical foundations of education and training in the United States;
 - (B) determine and implement pedagogical knowledge and skills learned in this course and needed by teaching and training professionals;
 - (C) identify qualities of effective schools;
 - (D) discuss non-traditional settings for teaching and training careers such as those in corporations, community outreach programs, nonprofits, and government entities; and
 - (E) formulate a professional philosophy of education based on a personal set of beliefs.
- (4) The student understands the learner and the learning process. The student is expected to:
 - (A) relate and implement principles and theories of human development to teaching and training situations;
 - (B) relate and implement principles and theories about the learning process to teaching and training situations;

- (C) demonstrate and implement behaviors and skills that facilitate the learning process;
 - (D) explain the relationship between effective instructional practices and learning differences, learner exceptionality, and learners with special needs;
 - (E) evaluate backgrounds, strengths, and skills of students when planning instruction; and
 - (F) demonstrate techniques for developing effective relationships with students that foster mutual respect and rapport and result in effective instruction.
- (5) The student interacts effectively in the role of an educator. The student is expected to:
- (A) demonstrate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals;
 - (B) demonstrate methods for promoting stakeholder partnerships in improving educational outcomes; and
 - (C) describe the procedure for handling and reporting physical or emotional abuse.
- (6) The student plans and develops effective instruction. The student is expected to:
- (A) explain the role of the Texas Essential Knowledge and Skills in planning and evaluating instruction;
 - (B) explain the rationale for having a fundamental knowledge of the subject matter in order to plan, prepare, and deliver effective instruction;
 - (C) explain the rationale for and process of instructional planning components such as vertical alignment and scope and sequence;
 - (D) describe principles and theories that impact instructional planning;
 - (E) create clear short-term and long-term learning objectives that are developmentally appropriate for students; and
 - (F) demonstrate lesson planning to meet instructional goals.
- (7) The student creates an effective learning environment. The student is expected to:
- (A) describe and implement a safe and an effective learning environment that incorporates the principles of universal design;
 - (B) analyze and evaluate strategic student grouping techniques that result in effective instruction;
 - (C) demonstrate teacher and trainer practices that promote an effective learning environment;
 - (D) evaluate materials and equipment to determine age and grade level appropriateness and to meet the needs of diverse learners;
 - (E) identify classroom management techniques that promote an effective learning environment; and
 - (F) demonstrate communication, conflict-management, and mediation techniques supportive of an effective learning environment.
- (8) The student assesses teaching and learning. The student is expected to:
- (A) describe the role of assessment as part of the learning process;
 - (B) create assessments to measure student learning;
 - (C) analyze the assessment process;
 - (D) use appropriate assessment strategies in an instructional setting; and
 - (E) use assessment data to evaluate and revise lesson plans.

- (9) The student understands the relationship between school and society. The student is expected to:
- (A) explain the relationship between school and society;
 - (B) recognize and use resources for professional growth such as family, school, and community resources; and
 - (C) collaborate with stakeholders such as family, school, and community to promote learning.
- (10) The student develops technology skills. The student is expected to:
- (A) describe the role of technology in the instructional process;
 - (B) use technology applications appropriate for specific subject matter and student needs; and
 - (C) demonstrate skillful use of technology as a tool for instruction, evaluation, and management.
- (11) The student understands the professional, ethical, and legal responsibilities in teaching and training. The student is expected to:
- (A) describe teacher and trainer practices that promote professional and ethical conduct;
 - (B) analyze professional and ethical standards that apply to educators and trainers;
 - (C) analyze situations requiring decisions based on professional, ethical, and legal considerations; and
 - (D) analyze expected effects of compliance and non-compliance with the Code of Ethics and Standard Practices for Texas Educators.
- (12) The student participates in field-based experiences in education and training. The student is expected to:
- (A) apply instructional strategies and concepts within a local educational or training facility; and
 - (B) document, assess, and reflect on instructional experiences.
- (13) The student documents technical knowledge and skills. The student is expected to:
- (A) update professional portfolio components such as resume, samples of work, service-learning log, assessment results, and mock scholarship applications; and
 - (B) present the portfolio to interested stakeholders.
- (14) The student demonstrates the knowledge and skills needed to provide meaningful, specific, and timely feedback to students, families, and other school personnel on the growth of students in relation to classroom goals while maintaining student confidentiality. The student is expected to:
- (A) explain the role feedback plays in the learning process;
 - (B) provide guidance and feedback to motivate student behavior and outcomes;
 - (C) demonstrate methods of providing feedback to students such as checklists, classroom processes, and written documentation;
 - (D) demonstrate methods of accepting and reflecting on feedback to determine plans for improvement of educational outcomes; and
 - (E) apply questioning strategies to facilitate student discussion.
- (15) The student demonstrates knowledge and understanding of teacher responsibility with regard to accommodations and modifications for students with special needs. The student is expected to:
- (A) explain the structure and components of an individualized education program (IEP);
 - (B) explain the structure and components of a 504 plan; and

- (C) compare accommodations and modifications for students with special needs.
- (16) The student demonstrates proper record-keeping strategies needed by teachers to demonstrate evidence of student progress. The student is expected to:
 - (A) understand and demonstrate the use of learning management systems and record-keeping tools;
 - (B) outline school district policies related to teacher record keeping; and
 - (C) identify the essential components of behavioral and academic records according to state and school district policy.
- (17) The student uses standard observation techniques to observe a variety of educational settings. The student is expected to:
 - (A) evaluate teaching styles, learning environments, and classroom management utilizing observation checklists or other observation and evaluation tools; and
 - (B) use observation and evaluation reports to reflect on teaching practices and develop strategies for improvement.
- (18) The student assesses the benefits of how a mentor relationship impacts a teaching career. The student is expected to:
 - (A) recognize the benefits of a mentor relationship such as increased teacher retention, mentor guidance, and coaching; and
 - (B) seek out and foster mentorship opportunities.
- (19) The student analyzes teacher employment requirements and professional growth opportunities for those in the education profession such as required education and certification. The student is expected to:
 - (A) describe required education needed to become a certified teacher;
 - (B) explain the steps for becoming a certified teacher in Texas;
 - (C) compare certification requirements for various content and grade level areas of interest; and
 - (D) identify various financial aid sources available for teacher candidates such as scholarships, student loans, and student loan forgiveness options once certified.

§127.326. Practicum in Education and Training (Two Credits), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
 - (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.

(b) [(a)] General requirements. This course is recommended for students in Grade 12. Prerequisite: Instructional Practices. Recommended prerequisites: Principles of Education and Training, Human Growth and Development, and Child Development. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

(c) [(b)] Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
- (3) Practicum in Education and Training is a field-based course that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and perform other duties of classroom teachers, trainers, paraprofessionals, or other educational personnel.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) [(c)] Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by teaching and training profession. The student is expected to:
 - (A) demonstrate advanced written communication skills;
 - (B) perform job-appropriate numerical and arithmetic application;
 - (C) demonstrate appropriate forms of communication such as verbal and non-verbal communication used in educational and career settings;
 - (D) promote and exhibit teamwork skills;
 - (E) analyze and apply decision-making skills;
 - (F) implement problem-solving techniques effectively;
 - (G) analyze and demonstrate conflict-management skills;
 - (H) assess personal leadership skills in education settings;
 - (I) describe and demonstrate professionalism; and
 - (J) analyze and demonstrate effective work ethic practices.
- (2) The student analyzes strategies that promote health and wellness to address the unique challenges in balancing work and personal responsibilities for educators. The student is expected to:
 - (A) examine signs of personal stress and anxiety;
 - (B) describe and develop appropriate boundaries for a healthy work-life balance; and
 - (C) identify and implement strategies to manage health and wellness.

- (3) The student explores the teaching and training field and profession. The student is expected to:
- (A) analyze current trends and issues that impact education such as political, societal, and economic trends and issues;
 - (B) analyze practices of effective teaching and training professionals;
 - (C) analyze qualities of effective schools;
 - (D) develop a written summary of professional beliefs and values about education and training;
 - (E) determine the educational/academic requirements and possible degrees/certifications necessary for a profession of interest in teaching and training;
 - (F) refine a personal career plan in preparation for a career in the field of education or training;
 - (G) research and identify teaching and training opportunities in non-traditional settings such as those in corporations, community outreach programs, nonprofits, and government entities; and
 - (H) research and identify educational high-needs and teacher-shortage areas.
- (4) The student understands the learner and learning process. The student is expected to:
- (A) apply principles and theories of human development appropriate to specific teaching or training situations;
 - (B) apply principles and theories about the learning process to specific teaching or training situations;
 - (C) analyze the dynamics of educator and student behaviors that facilitate the learning process;
 - (D) analyze teaching skills that facilitate the learning process; and
 - (E) demonstrate and evaluate effective instructional practices to accommodate diversity such as learning differences, learner exceptionality, and special needs.
- (5) The student interacts effectively in the role of an educator. The student is expected to:
- (A) demonstrate and evaluate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals; and
 - (B) demonstrate and evaluate techniques that promote literacy.
- (6) The student plans and uses effective instruction. The student is expected to:
- (A) apply principles and theories that impact instructional planning;
 - (B) use lesson planning tools such as unit plans and scope and sequence and vertical alignment documents;
 - (C) develop instructional materials that align with the Texas Essential Knowledge and Skills;
 - (D) demonstrate competency in foundation and enrichment subject areas;
 - (E) apply research-based practices to create lessons plans that meet instructional goals;
 - (F) analyze the development of effective instructional strategies;
 - (G) evaluate and analyze effectiveness of lessons plans and instructional strategies used in a lesson or series of lessons; and
 - (H) explain how learner and professional feedback is used to guide selection and adjustment of instructional strategies.
- (7) The student creates and maintains an effective learning environment. The student is expected to:

- (A) apply principles of universal design to create and maintain a safe and effective learning environment;
 - (B) integrate teacher or trainer practices that promote an effective learning environment;
 - (C) apply classroom management techniques that promote an effective learning environment; and
 - (D) demonstrate specific conflict-management and mediation techniques supportive of an effective learning environment.
- (8) The student assesses instruction and learning. The student is expected to:
- (A) develop and apply formative and summative assessments to foster student learning;
 - (B) use assessment strategies to promote personal growth and teaching or training improvement;
 - (C) use self-reflection techniques to promote personal growth and teaching or training improvement; and
 - (D) use classroom and standardized test assessment data to drive instructional strategy.
- (9) The student understands the relationship between school and society. The student is expected to:
- (A) identify ways to support learning through advocacy;
 - (B) identify and select family, school, and community resources that support learning; and
 - (C) promote learning and build support through positive school partnership activities with stakeholders such as families, schools, communities, and business/industry.
- (10) The student develops technology skills. The student is expected to:
- (A) access and use current technology applications appropriate for specific subject matter and student needs; and
 - (B) integrate the use of technology as a tool for instruction, evaluation, and management effectively.
- (11) The student understands the professional, ethical, and legal responsibilities in teaching and training. The student is expected to:
- (A) analyze teacher and trainer practices that promote professional and ethical conduct;
 - (B) analyze professional and ethical standards that apply to educators and trainers;
 - (C) analyze situations requiring decisions based on professional, ethical, and legal considerations; and
 - (D) analyze potential consequences related to non-compliance with the Code of Ethics and Standard Practices for Texas Educators.
- (12) The student explores the need and opportunities for continued professional development for educators and trainers. The student is expected to:
- (A) identify strategies and resources for the professional development of educators or trainers such as research and assessment;
 - (B) demonstrate teacher or trainer practices that promote ongoing professional development and lifelong learning; and
 - (C) develop a plan for professional growth.
- (13) The student participates in field-based experiences in education or training. The student is expected to:

- (A) apply instructional strategies and concepts within a local educational or training facility;
and
 - (B) document, assess, and reflect on instructional experiences.
- (14) The student documents technical knowledge and skills. The student is expected to:
- (A) gather artifacts and documentation that support attainment of technical skill competencies;
 - (B) update a professional portfolio to include components such as a resume, samples of work, service-learning logs, recognitions, awards, scholarship essays, letters of recommendation, certifications, and evaluations; and
 - (C) present a professional portfolio to interested stakeholders.

ATTACHMENT II
Text of Proposed New 19 TAC

**Chapter 127. Texas Essential Knowledge and Skills for Career Development and Career
and Technical Education**

Subchapter I. Health Science

~~§127.416. Implementation of Texas Essential Knowledge and Skills for Health Science, Adopted 2021.~~

- ~~(a) The provisions of this subchapter shall be implemented by school districts beginning with the 2022-2023 school year.~~
- ~~(b) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for career and technical education as adopted in §§127.417-127.433 of this subchapter.~~
- ~~(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§127.417-127.433 of this subchapter shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.~~
- ~~(d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §§127.417-127.433 of this subchapter shall be implemented for the following school year.~~

§127.417. Medical Terminology (One Credit), Adopted 2021.

- ~~(a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.~~
- ~~(1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.~~
- ~~(2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.~~
- ~~(3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.~~
- ~~(b) ~~(a)~~ General requirements. This course is recommended for students in Grades 9-12. Students shall be awarded one credit for successful completion of this course.~~
- ~~(c) ~~(b)~~ Introduction.~~
- ~~(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.~~
- ~~(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.~~

- (3) The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.
- (4) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
- (5) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to learn the knowledge and skills necessary to pursue a health science career through further education and employment.
- (6) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.
- (7) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (8) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) express ideas in a clear, concise, and effective manner;
 - (B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and
 - (C) exemplify professional work standards such as appearance, attire, time management, organizational skills, and responsibilities.
- (2) The student recognizes the terminology related to the health science industry. The student is expected to:
 - (A) identify abbreviations, acronyms, and symbols related to the health science industry;
 - (B) recognize the incorrect use of abbreviations, acronyms, and symbols through review of The Joint Commission's "Do Not Use List";
 - (C) identify and define the component parts of medical words, including root, prefix, suffix, and combining vowels;
 - (D) practice word-building skills;
 - (E) research the origins of eponyms;
 - (F) recall directional terms and anatomical planes related to body structure;
 - (G) define and accurately spell occupationally specific terms such as those relating to the body systems, surgical and diagnostic procedures, diseases, and treatment; and
 - (H) use prior knowledge and experiences to understand the meaning of terms as they relate to the health science industry.
- (3) The student demonstrates communication skills using the terminology applicable to the health science industry. The student is expected to:
 - (A) demonstrate appropriate verbal and written strategies such as correct pronunciation of medical terms and spelling in a variety of health science scenarios;

- (B) employ increasingly precise language to communicate; and
- (C) translate technical material related to the health science industry.
- (4) The student examines available resources. The student is expected to:
 - (A) examine medical and dental dictionaries and multimedia resources;
 - (B) integrate resources to interpret technical materials; and
 - (C) investigate electronic and digital media with appropriate supervision.
- (5) The student interprets medical abbreviations. The student is expected to:
 - (A) distinguish medical abbreviations used throughout the health science industry; and
 - (B) translate medical abbreviations in simulated technical material such as physician progress notes, radiological reports, and laboratory reports.
- (6) The student appropriately translates health science industry terms. The student is expected to:
 - (A) interpret, transcribe, and communicate vocabulary related to the health science industry;
 - (B) translate medical terms to conversational language to facilitate communication;
 - (C) distinguish medical terminology associated with medical specialists such as geneticists, pathologists, and oncologists;
 - (D) summarize observations using medical terminology; and
 - (E) interpret contents of medical scenarios correctly.

§127.418. Health Informatics (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
 - (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Medical Terminology. Recommended prerequisites: Principles of Health Science and Business Information Management I. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

- (3) The Health Informatics course is designed to provide knowledge of one of the fastest growing areas in both academic and professional fields. Healthcare information technology has increased demand for information and health professionals who can effectively design, develop, and use technologies such as electronic medical records, patient monitoring systems, and digital libraries. This course will include a focus on billing and coding.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;
 - (B) demonstrate adaptability skills such as problem solving and critical and creative thinking;
 - (C) develop a career plan;
 - (D) exhibit teamwork;
 - (E) create a job-specific resume; and
 - (F) exemplify professional work standards such as appearance, attire, time management, organizational skills, and responsibilities.
- (2) The student interprets fundamental knowledge of concepts of health information systems technology and the tools for collecting, storing, and retrieving health care data. The student is expected to:
 - (A) discuss, define, and differentiate the common health information systems such as electronic medical records and electronic health records, practice management software, master patient index (MPI), patient portals, remote patient monitoring, and clinical decision support; and
 - (B) explain how various health information systems support the administrative, financial, clinical, and research needs of a health care enterprise.
- (3) The student employs the various types of databases in relation to health informatics. The student is expected to:
 - (A) define the function of a database management system;
 - (B) identify the purpose of data modeling;
 - (C) define the customary steps in the data modeling process;
 - (D) differentiate between entities, attributes, and relationships in a data model; and
 - (E) explain various types of organizational databases.
- (4) The student distinguishes between data and information. The student is expected to:
 - (A) discuss the importance of data security, accuracy, integrity, reliability, and validity; and
 - (B) demonstrate an understanding of data information concepts for health information systems, electronic health records, and patient registries.
- (5) The student examines the evolution of the health information system. The student is expected to:
 - (A) evaluate the growing role of the electronic health record;
 - (B) review the progress of the development of the electronic health record;

- (C) explain functional requirements for electronic health records; and
- (D) explain the concept and importance of the interoperability of electronic health records and other health information systems.
- (6) The student examines the process of medical diagnostic and coding concepts as well as current procedural practices. The student is expected to:
 - (A) examine Health Insurance Portability and Accountability Act (HIPAA) guidelines for confidentiality, privacy, and security of a patient's information within the medical record;
 - (B) differentiate between insurance fraud and insurance abuse;
 - (C) discuss the linkage between current procedural terminology (CPT) codes; International Classification of Diseases, 10th revision, Clinical Modification (ICD-10-CM) codes; and medical necessity for reimbursement for charges billed;
 - (D) search ICD-10-CM code system for correct diagnosis code using patient information;
 - (E) identify the two types of codes in the health care common procedure coding system (HCPCS); and
 - (F) explain how medical coding affects the payment process.
- (7) The student identifies agencies involved in the health insurance claims process. The student is expected to:
 - (A) define fiscal intermediary;
 - (B) define Medicaid and Medicare;
 - (C) discuss health care benefit programs such as TRICARE and Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA);
 - (D) explain how to manage a worker's compensation case;
 - (E) complete a current health insurance claim form such as the Centers for Medicare and Medicaid Service (CMS-1500) form; and
 - (F) identify three ways to transmit electronic claims.

§127.419. Healthcare Administration and Management (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
 - (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Medical Terminology and Business Information Management I. Recommended prerequisite: Principles of Health Science. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
- (3) Healthcare Administration and Management is designed to familiarize students with the concepts related to healthcare administration as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills required by the healthcare industry. The student is expected to:
 - (A) role play examples of effective written and oral communication in various scenarios such as customer service, marketing, and public relations;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
- (2) The student demonstrates an understanding of the healthcare management concept. The student is expected to:
 - (A) define the term healthcare management;
 - (B) explain the roles and responsibilities of healthcare professionals, including the management functions of planning, organizing, staffing, leading, and controlling;
 - (C) explain how organizational behavior and teamwork in healthcare impact patient outcomes and effective day-to-day operations;
 - (D) explore and discuss the factors that influence healthcare management such as governmental regulations, payment models, employee turnover, and workforce shortages;
 - (E) define ethical workplace behavior and role play how to make ethical decisions; and
 - (F) explain how socially responsible management policies such as health equity, inclusion, and diversity policies are initiated and implemented.
- (3) The student recognizes the business functions of healthcare systems. The student is expected to:
 - (A) differentiate among the major healthcare delivery systems such as hospitals, outpatient care facilities, community-based organizations, insurance companies, and pharmaceutical companies;
 - (B) define and discuss healthcare quality and quality improvement;

- (C) specify various types of health information technology and discuss barriers to health information technology adoption;
 - (D) investigate healthcare financing models;
 - (E) explain the difference between and provide examples of healthcare revenues and healthcare expenses;
 - (F) define revenue-cycle management; and
 - (G) describe the roles of customer service and marketing in health care.
- (4) The student evaluates ethical behavioral standards and legal responsibilities. The student is expected to:
- (A) research and describe the role of professional associations and regulatory agencies;
 - (B) examine legal and ethical behavior standards such as Patient Bill of Rights, Advanced Directives, and the Health Insurance Portability and Accountability Act (HIPAA);
 - (C) investigate the legal and ethical ramifications of unacceptable behavior;
 - (D) identify examples of conflicts of interest; and
 - (E) differentiate between the concepts of fraud, waste, and abuse.

§127.420. World Health and Emerging Technologies (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
- (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2022-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and Principles of Health Science. Recommended prerequisite: Medical Terminology. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) The World Health and Emerging Technologies course is designed to examine major world health problems and emerging technologies as solutions to these medical concerns. It is designed to improve students' understanding of cultural, infrastructural, political, educational, and technological constraints and inspire ideas for appropriate technological solutions to global medical care issues.

- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;
 - (B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and
 - (C) exemplify professional work standards such as appearance, attire, time management, organizational skills, and responsibilities.
- (2) The student explores and discusses current major human health problems in the world. The student is expected to:
 - (A) describe the pathophysiology of the three leading causes of death in developing and developed countries;
 - (B) discuss history of diseases and the evolution of medical technology over time;
 - (C) contrast health problems in developing and developed countries;
 - (D) compare the functions of public health organizations at the local; state; national, including the Centers for Disease Control and Prevention (CDC); and international, including the World Health Organization (WHO), levels;
 - (E) define and calculate incidence, morbidity, and mortality;
 - (F) identify and describe the challenges in global health that can have the greatest impact on health in developing nations; and
 - (G) investigate various social determinants of health such as food insecurity, homelessness, or financial insecurities.
- (3) The student explains who pays for health care in the world today. The student is expected to:
 - (A) compare the availability of health care in developing and developed countries;
 - (B) discuss and contrast the four basic healthcare system models, including the Beveridge Model, Bismarck Model, National Health Insurance Model, and the Out-of-Pocket Model, and compare these models to existing payment mechanisms in the United States of America;
 - (C) explain how countries that have different healthcare systems such as Canada, the United Kingdom, Japan, Germany, Taiwan, Switzerland, and the United States of America pay for health care and compare their patient outcomes such as infant mortality rates, rate of cancer, or rate of heart disease;
 - (D) describe how healthcare expenditures have changed over time; and
 - (E) identify the major contributors to the rising healthcare industry costs.
- (4) The student describes the engineering technologies developed to address clinical needs. The student is expected to:
 - (A) describe technologies that support the prevention and treatment of infectious diseases;
 - (B) explain the implication of vaccines on the immune system and on public health;
 - (C) discuss the dangers of antibiotic overuse and misuse;

- (D) investigate technologies such as genetics and molecular diagnostics used for the early detection and treatments of several types of cancers;
 - (E) describe and discuss the technologies used in the diagnosis and treatment of heart disease;
 - (F) describe and discuss technologies developed to support vital organ failure; and
 - (G) investigate emerging digital technology such as telehealth and remote monitoring and its impact on healthcare delivery.
- (5) The student explores how human clinical trials are designed, conducted, and evaluated. The student is expected to:
- (A) describe and discuss types of clinical trials, including the role of the institutional review board;
 - (B) define and calculate a sample size;
 - (C) identify quantitative and qualitative methods used in clinical trials; and
 - (D) compare and contrast different phases of pharmaceutical trials.
- (6) The student recognizes the ethical and legal aspects involved in clinical research. The student is expected to identify issues and explain the ethical and legal guidelines for the conduct of research involving human subjects, including informed consent and patient confidentiality.
- (7) The student explains how research guides the development of new medical technologies. The student is expected to:
- (A) describe how health science research is funded;
 - (B) explain the role of the U.S. Food and Drug Administration in approving new drugs and medical devices; and
 - (C) analyze factors that affect the dissemination of new medical technologies.
- (8) The student applies research principles to create a project that addresses a major health topic. The student is expected to:
- (A) facilitate data analysis and communicate experimental results clearly by effectively using technology such as creating visual aids; and
 - (B) present the project to classmates, health professionals, parents, or instructors.

§127.421. Medical Billing and Coding (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
- (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.

(b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Medical Terminology. Students shall be awarded one credit for successful completion of this course.

(c) ~~(b)~~ Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
- (3) Medical Billing and Coding familiarizes students with the process, language, medical procedure codes, requirements of Health Insurance Portability and Accountability Act (HIPAA), and skills they will need to make accurate records. Students will develop an understanding of the entire process of the revenue cycle and how to effectively manage it. The program is designed to prepare students for employment in a variety of health care settings as entry level coder, medical billing specialist, and patient access representative.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(c)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills required by the healthcare industry. The student is expected to:
 - (A) demonstrate the ability to communicate and use interpersonal skills effectively;
 - (B) compose written communication, including emails using correct spelling, grammar, formatting, and confidentiality;
 - (C) use appropriate medical terminology and abbreviations; and
 - (D) model courtesy and respect for patients and team members in the multi-disciplinary healthcare setting and maintain good interpersonal relationships.
- (2) The student explores career opportunities in revenue cycle management. The student is expected to:
 - (A) identify professional opportunities within the medical billing and revenue cycle management professions;
 - (B) demonstrate ethical billing and coding practices as outlined by professional associations guidelines; and
 - (C) investigate professional associations applicable to the field of health informatics such as American Academy of Professional Coders (AAPC), American Health Information Management Association (AHIMA), Healthcare Billing and Management Association (HBMA), and American Association of Healthcare Administrative Management (AAHAM).
- (3) The student explains the ethical and legal responsibilities of personnel in medical billing and coding. The student is expected to:
 - (A) identify major administrative agencies that affect billing and coding such as Centers for Medicare and Medicaid Services (CMS) and the Office of the Inspector General (OIG);
 - (B) identify major laws and regulations that impact health information, including HIPAA, the Stark Law, the Fair Debt Collection Practices Act, and the False Claims Act;

- (C) analyze legal and ethical issues related to medical billing and coding, revenue cycle management, and documentation within the medical record;
 - (D) research compliance laws;
 - (E) identify appropriate documentation required for the release of patient information;
 - (F) differentiate between informed and implied consent;
 - (G) compare and contrast use of information and disclosure or information; and
 - (H) evaluate cases for insurance fraud and abuse.
- (4) The student identifies the body systems to support proficiency in billing and coding. The student is expected to:
- (A) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) and Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems and how they apply to medical billing and coding, including:
 - (i) the integumentary system;
 - (ii) the skeletal system;
 - (iii) the muscular system;
 - (iv) the cardiovascular system;
 - (v) the respiratory system;
 - (vi) the digestive system;
 - (vii) the endocrine system;
 - (viii) the urinary system;
 - (ix) the reproductive system; and
 - (x) the nervous system and special senses; and
 - (B) identify mental, behavioral, and neurodevelopmental disorders and how they apply to medical billing and coding.
- (5) The student demonstrates proficiency in the use of the ICD-10-CM, CPT, and Healthcare Common Procedure Coding System (HCPCS) coding systems. The student is expected to:
- (A) apply coding conventions and guidelines for appropriate charge capture;
 - (B) describe the process to update coding resources;
 - (C) assign and verify diagnosis and procedure codes to the highest level of specificity, and, as applicable, HCPCS level II codes and modifiers in accordance with official guidelines;
 - (D) describe the concepts of disease groupings and procedure-code bundling; and
 - (E) identify coding compliance, including medical necessity.
- (6) The student understands revenue cycle management. The student is expected to:
- (A) define revenue cycle management;
 - (B) differentiate between various types of employer-sponsored and government-sponsored insurance models, including health maintenance organization (HMO), preferred-provider organization (PPO), Medicare, Medicaid, TRICARE, high deductible health plans, and workers' compensation;
 - (C) define Medicare Administrative Contractors (MACs) and investigate the administrative services provided by the MAC for Texas;

- (D) describe the patient scheduling and check-in process, including verifying insurance eligibility, obtaining pre-authorization, and processing appropriate patient authorization and referral forms;
- (E) describe the sections of the CMS-1500 form to prepare and submit mock clean claims electronically or manually;
- (F) differentiate between primary and secondary insurance plans to initially process crossover claims;
- (G) interpret remittance advice to determine financial responsibility of insurance company and patient, including a cash-paying patient;
- (H) analyze reason for insurance company denials or rejections and determine corrections or appeals required; and
- (I) analyze an aging report and how it relates to the revenue cycle.

§127.422. Health Science Theory (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
 - (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and one credit from a level one course or level two course within a health science program of study. Recommended prerequisite: Medical Terminology. Recommended corequisite: Health Science Clinical. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.
 - (4) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
 - (5) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and

collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to learn the knowledge and skills necessary to pursue a health science career through further education and employment.

- (6) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.
- (7) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (8) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) express ideas in a clear, concise, and effective manner;
 - (B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and
 - (C) model industry expectations of professional conduct such as attendance, punctuality, appropriate professional dress, proper hygiene, and time management.
- (2) The student demonstrates patient-centered skills and interactions that foster trust and lead to a quality customer service experience. The student is expected to:
 - (A) demonstrate care, empathy, and compassion;
 - (B) communicate medical information accurately and efficiently in language that patients can understand; and
 - (C) comply with Health Insurance Portability and Accountability Act (HIPAA) policy standards.
- (3) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to:
 - (A) solve mathematical calculations appropriate to situations in a healthcare-related environment;
 - (B) express ideas clearly in writing and develop skills in documentation related to health science;
 - (C) interpret complex technical material related to the health science industry;
 - (D) summarize biological and chemical processes in the body such as maintaining homeostasis; and
 - (E) research topics related to health science such as the global impact of disease prevention.
- (4) The student demonstrates verbal, non-verbal, and electronic communication skills. The student is expected to:
 - (A) demonstrate therapeutic communication appropriate to the situation;
 - (B) use appropriate verbal and non-verbal skills when communicating with persons with sensory loss and language barriers in a simulated setting; and
 - (C) use electronic communication devices in the classroom or clinical setting appropriately.
- (5) The student analyzes and evaluates communication skills for maintaining healthy relationships in the healthcare workplace. The student is expected to:

- (A) evaluate how healthy relationships influence career performance;
 - (B) identify the role of communication skills in building and maintaining healthy relationships;
 - (C) demonstrate strategies for communicating needs, wants, and emotions in a healthcare setting; and
 - (D) evaluate the effectiveness of conflict-resolution techniques in various simulated healthcare workplace situations.
- (6) The student documents and records medical information into a permanent health record. The student is expected to:
- (A) research document formats such as dental or medical records;
 - (B) prepare health documents or records according to industry-based standards; and
 - (C) record health information on paper and electronic formats such as patient history, vital statistics, and test results.
- (7) The student describes industry requirements necessary for employment in health science occupations. The student is expected to:
- (A) research education, certification, licensing, and continuing education requirements and salary related to specific health science careers; and
 - (B) practice employment procedures for a specific health science career such as resume building, application completion, and interviewing.
- (8) The student identifies problems and participates in the decision-making process. The student is expected to:
- (A) apply critical-thinking, adaptability, and consensus-building skills to solve problems relevant to health science;
 - (B) evaluate the impact of decisions in health science; and
 - (C) suggest modifications to a decision or plan based on healthcare outcomes.
- (9) The student demonstrates comprehension and proficiency of clinical skills used by health science professionals in a classroom or clinical setting. The student is expected to:
- (A) comply with specific industry standards related to safety requirements;
 - (B) employ medical vocabulary specific to the healthcare setting;
 - (C) perform admission, discharge, and transfer functions in a simulated setting;
 - (D) demonstrate skills related to assisting patients with activities of daily living such as dressing, undressing, grooming, bathing, and feeding;
 - (E) determine proper equipment needed for patient ambulation such as gait belts, wheelchairs, crutches, or walkers;
 - (F) demonstrate skills related to assessing range of motion and assisting with mobility, including positioning, turning, lifting, and transferring patients for treatment or examination;
 - (G) role play techniques used in stressful situations such as situations involving trauma and chronic and terminal illness;
 - (H) demonstrate first aid, vital signs, cardiopulmonary resuscitation, and automated external defibrillator skills; and

- (I) identify basic skills specific to a health science profession such as medical assistant, dental assistant, emergency medical technician-basic, phlebotomy technician, and pharmacy technician.
- (10) The student evaluates ethical behavioral standards and legal responsibilities of a health science professional. The student is expected to:
 - (A) research and describe the role of professional associations and regulatory agencies;
 - (B) examine legal and ethical behavior standards such as Patient Bill of Rights, advanced directives, and HIPAA; and
 - (C) investigate the legal, ethical, and professional ramifications of unacceptable or discriminatory behavior.
- (11) The student exhibits the leadership skills necessary to function in a healthcare setting. The student is expected to:
 - (A) identify essential leadership skills of health science professionals;
 - (B) assess group dynamics in real or simulated groups; and
 - (C) integrate consensus-building techniques.
- (12) The student maintains a safe work environment. The student is expected to:
 - (A) describe governmental regulations and guidelines from entities such as the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), The Joint Commission, and the National Institute of Health (NIH);
 - (B) explain protocols related to hazardous materials and situations such as personal protective equipment (PPE) and blood borne pathogen exposure;
 - (C) describe how to assess and report unsafe conditions;
 - (D) identify the benefits of recycling and waste management for cost containment and environmental protection; and
 - (E) demonstrate proper body mechanics to reduce the risk of injury.
- (13) The student assesses wellness strategies for the prevention of disease. The student is expected to:
 - (A) research wellness strategies for the prevention of disease;
 - (B) evaluate positive and negative effects of relationships on physical and emotional health;
 - (C) explain the benefits of positive relationships between community members and health professionals in promoting a healthy community;
 - (D) research and analyze the effects of access to quality health care;
 - (E) research alternative health practices and therapies; and
 - (F) explain the changes in structure and function of the body due to trauma and disease.

§127.423. Anatomy and Physiology (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
 - (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.

- (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
- (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 10-12. Prerequisite: one credit in biology and one additional credit of high school science. Recommended prerequisite: a course from the Health Science Career Cluster. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
- (3) The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.
- (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (5) Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
- (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
- (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

- (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) [(e)] Knowledge and skills.

- (1) Employability skills. The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;
 - (B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and
 - (C) investigate necessary skills for health careers related to anatomy and physiology.
- (2) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as lab notebooks or journals, calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, meter sticks, electronic balances, micro pipettors, hand lenses, Celsius thermometers, hot plates, timing devices, Petri dishes, agar, lab incubators, dissection equipment, models, diagrams, or samples of biological specimens or structures, reflex hammers, pulse oximeters, stethoscope, otoscope, sphygmomanometers, pen lights, and ultrasound equipment;
 - (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;
 - (F) organize quantitative and qualitative data using lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports;

- (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
- (H) distinguish among scientific hypotheses, theories, and laws.
- (3) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
 - (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (4) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
 - (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) Scientific and engineering practices. The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:
 - (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing, so as to encourage critical thinking by the student;
 - (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) or health science field in order to investigate careers.
- (6) Human body organization. The student demonstrates an understanding of the anatomic and physiological basis of life and the ability to explain the interdependence of structure and function in biological systems. The student is expected to:
 - (A) distinguish between the six levels of structural organization in the human body, including chemical, cellular, tissue, organ, system, and organism, and explain their interdependence;
 - (B) identify and use appropriate directional terminology when referring to the human body, including directional terms, planes, body cavities, and body quadrants;
 - (C) identify and describe the major characteristics of living organisms, including response to stimuli, growth and development, homeostasis, cellular composition, metabolism, reproduction, and the ability to adapt to the environment;
 - (D) research and describe negative and positive feedback loops as they apply to homeostasis; and

- (E) research and identify the effects of the failure to maintain homeostasis as it relates to common diseases in each of the body systems.
- (7) Histology. The student demonstrates the ability to analyze the structure and function of eukaryotic cells in relation to the formation of tissue. The student is expected to:
- (A) define tissue and identify the four primary tissue types, their subdivisions, and functions;
 - (B) compare epithelial tissue and connective tissue in terms of cell arrangement and interstitial materials;
 - (C) describe the process of tissue repair involved in the normal healing of a superficial wound; and
 - (D) describe the general metabolic pathways of carbohydrates, lipids, and proteins.
- (8) Skeletal system. The student analyzes the relationships between the anatomical structures and physiological functions of the skeletal system. The student is expected to:
- (A) identify and differentiate between the axial skeleton and appendicular skeleton;
 - (B) identify the types of joints, including gliding, hinge, pivot, saddle, and ball and socket, and describe the movements of each;
 - (C) identify and locate the anatomy of spongy and compact bone, including epiphysis, diaphysis, medullary cavity, periosteum, bone marrow, and endosteum;
 - (D) explain the major physiological functions of the skeletal system;
 - (E) describe the role of osteoblasts, osteocytes, and osteoclasts in bone growth and repair;
 - (F) identify and describe the different types of fractures such as compound, complete, simple, spiral, greenstick, hairline, transverse, and comminuted; and
 - (G) identify and describe common diseases and disorders of the skeletal system such as scoliosis, osteoporosis, and bone cancer.
- (9) Integumentary system. The student analyzes the relationships between the anatomical structures and physiological functions of the integumentary system. The student is expected to:
- (A) identify and describe the structures of the integumentary system, including layers of the skin, accessory organs within each layer, and glandular components in each layer;
 - (B) describe the factors that can contribute to skin color;
 - (C) describe and explain the process of tissue repair and scar formation; and
 - (D) identify and describe common diseases and disorders of the integumentary system such as skin cancer and psoriasis.
- (10) Muscular system. The student analyzes the relationships between the anatomical structures and physiological functions of the muscular system. The student is expected to:
- (A) explain the major physiological functions of the muscular system, including voluntary movement, involuntary movement, heat production, and maintaining posture;
 - (B) explain the coordination of muscles, bones, and joints that allows movement of the body, including the methods of attachment of ligaments and tendons;
 - (C) examine common characteristics of muscle tissue, including excitability, contractibility, extensibility, and elasticity;
 - (D) identify and describe the appearance, innervation, and function of the three muscle types, including cardiac, skeletal, and smooth;
 - (E) examine the microscopic anatomy of a muscle fiber, including sarcomere, actin, and myosin;

- (F) describe the mechanisms of muscle contraction at the neuromuscular junction;
 - (G) name, locate, and describe the action of major voluntary muscles in regions of the body, including the head and neck, trunk, upper extremity, and lower extremity;
 - (H) identify and describe common diseases and disorders of the muscular system such as muscle strains and muscular dystrophy; and
 - (I) analyze and describe the effects of pressure, movement, torque, tension, and elasticity on the human body.
- (11) Nervous system. The student analyzes the relationship between the anatomical structures and physiological functions of the nervous system. The student is expected to:
- (A) summarize and distinguish the major physiological functions of the nervous system, including sensation, integration, and motor response;
 - (B) identify the senses and explain their relationship to nervous system;
 - (C) investigate and explain the interdependence between the cranial and spinal nerves with the special senses of vision, hearing, smell, and taste;
 - (D) describe the anatomy of the structures associated with the senses, including vision, hearing, smell, taste, and touch;
 - (E) identify the anatomical and physiological divisions of the peripheral nervous system and central nervous system;
 - (F) explain the glial cells within the central nervous system and peripheral nervous system and their associated functions;
 - (G) analyze the functional and structural differences between gray and white matter relative to neurons;
 - (H) distinguish between the types of neurons and explain the initiation of a nerve impulse during resting and action potential;
 - (I) categorize the major neurotransmitters by chemical and physical mechanisms; and
 - (J) identify and describe common diseases and disorders of the nervous system such as epilepsy, neuralgia, Parkinson's disease, and Alzheimer's disease.
- (12) Endocrine system. The student analyzes the relationships between the anatomical structures and physiological functions of the endocrine system. The student is expected to:
- (A) identify and locate the nine glands associated with the endocrine system, including the ovaries, testes, pineal gland, pituitary gland, thyroid gland, parathyroid glands, thymus, pancreas, and adrenal glands;
 - (B) compare and contrast endocrine and exocrine glands and identify the glands associated with each;
 - (C) describe the hormones associated with each endocrine gland;
 - (D) research the impact of the endocrine systems on homeostatic mechanisms and other body systems such as the integration between the hypothalamus and the pituitary gland;
 - (E) explain how the endocrine glands are regulated, including neural, hormonal, and humoral control; and
 - (F) identify and describe common diseases and disorders of the endocrine system such as hypothyroidism, pancreatic cancer, and diabetes.
- (13) Urinary system. The student analyzes the relationships between the anatomical structures and physiological functions of the urinary system. The student is expected to:

- (A) identify and describe the anatomical structures and functions of the urinary system, including the kidney, ureters, bladder, and urethra;
 - (B) compare and contrast the anatomical structures and describe the functions of the male and female urinary system;
 - (C) summarize and illustrate the structures, functions, and types of nephrons;
 - (D) examine the methods of fluid balance and homeostasis in the urinary system, including fluid intake and output;
 - (E) analyze the composition of urine and the process of urine formation, including filtration, reabsorption, and secretion;
 - (F) describe the relationship between the nervous system, renal system, and muscular system before and during micturition; and
 - (G) identify and describe common diseases and disorders of the urinary system such as chronic kidney disease, kidney stones, urinary tract infections, and renal cancer.
- (14) Cardiovascular system. The student analyzes the relationships between the anatomical structures and physiological functions of the cardiovascular system. The student is expected to:
- (A) identify the major functions of the cardiovascular system, including transport, maintaining homeostasis, and immune response;
 - (B) compare and contrast the anatomical structure of arteries, arterioles, capillaries, venules, and veins;
 - (C) investigate and illustrate how systemic circulation transports blood, gasses, and nutrients from the heart to the internal and external anatomy of the heart, including tissue layers, chambers, valves, and coronary vessels;
 - (D) describe the relationship between blood flow and blood pressure, including systolic and diastolic pressure, pulse pressure, and mean arterial pressure;
 - (E) compare and contrast coronary, pulmonary, and systemic circulation, and describe the major vessels of each;
 - (F) illustrate how the PQRST waves of an electrocardiogram (EKG) demonstrate the conduction of electricity through the structures of the heart;
 - (G) describe the relationship between the cardiovascular system, nervous system, and muscular system in regulating cardiac output; and
 - (H) identify and describe common diseases and disorders of the cardiovascular system such as heart disease, myocardial infarction, ischemia, and hypertrophic cardiomyopathy.
- (15) Lymphatic system. The student analyzes the relationships between the anatomical structures and physiological functions of the lymphatic system and understands the immune response. The student is expected to:
- (A) evaluate the interaction of the lymphatic system with other body systems such as the circulatory system;
 - (B) describe the structure and function of the lymphatic organs and explain how lymph moves through the body;
 - (C) identify and describe the role and function of the immune cells, including T cells and B cells, within the lymphatic system structures;
 - (D) identify and determine antigens associated with ABO blood typing, including Rhesus (Rh) factor;
 - (E) summarize the ways the body protects and defends against disease, including inflammation, barrier defenses, and active and passive immunity;

- (F) describe the role of antigens and antibodies in the immune response; and
 - (G) identify and describe common diseases and disorders associated with the lymphatic and immune systems such as inherited or acquired immunodeficiencies, autoimmune diseases, and lymphomas.
- (16) Digestive system. The student analyzes the relationships between the anatomical structures and physiological functions of the digestive system. The student is expected to:
- (A) examine the anatomical structures and function of the alimentary canal and accessory organs;
 - (B) compare and contrast mechanical and chemical digestive processes;
 - (C) evaluate the modes by which energy is processed and stored within the body, including ingestion, propulsion, absorption, and elimination; and
 - (D) identify and describe common diseases and disorders of the digestive system such as gallstones, Crohn's disease, irritable bowel syndrome, and gastroesophageal reflux disorder.
- (17) Respiratory system. The student analyzes the relationships between the anatomical structures and physiological functions of the respiratory system. The student is expected to:
- (A) identify and sequence the anatomical structures and functions of the respiratory system;
 - (B) compare and contrast the functions of upper and lower respiratory tract;
 - (C) describe the physiology of respiration, including internal and external respiration and gas exchange;
 - (D) describe the relationship between the respiratory and cardiovascular systems during pulmonary circulation;
 - (E) investigate factors that affect respiration, including exercise and environmental changes such as altitude; and
 - (F) identify and describe common diseases of the respiratory system such as asthma, emphysema, pneumonia, viruses, and allergies.
- (18) Reproductive system. The student analyzes the relationships between the anatomical structures and physiological functions of the reproductive system. The student is expected to:
- (A) explain embryological development of cells, tissues, organs, and systems;
 - (B) describe and examine the location, structure, and functions of the internal and external female and male reproductive organs and accessory glands;
 - (C) describe and compare the process of oogenesis and spermatogenesis;
 - (D) research and discuss the physiological effects of hormones on the stages of the menstrual cycle;
 - (E) identify and distinguish the hormones involved in maturation and development throughout the life cycle, including puberty, gestation, and menopause; and
 - (F) identify and describe common diseases and disorders of the reproductive system such as sexually transmitted diseases and cancers of the female and male reproductive systems.
- (19) Emerging technologies. The student identifies emerging technological advances in science and healthcare treatment and delivery. The student is expected to:
- (A) research and discuss advances in science and medicine at the organ and tissue level such as bionics and wearable monitoring technologies; and
 - (B) research and describe advances in science and medicine at the cellular level such as stem cells and gene therapy.

§127.424. Pathophysiology (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
- (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: Anatomy and Physiology. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) The Pathophysiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology will study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease.
 - (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
 - (5) Students are expected to know that:
 - (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
 - (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve

collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

- (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
- (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner; and
 - (B) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team.
- (2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micro pipettors, hand lenses, Celsius thermometers, hot plates, timing devices, Petri dishes, lab incubators, biochemical media and stains dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures;
 - (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

- (F) organize quantitative and qualitative data using lab notebooks or journals, lab reports, labeled drawings, graphic organizers, peer reviewed medical journals, summaries, oral reports, and technology-based reports;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;
 - (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) or health science field in order to investigate careers.
- (6) The student analyzes the mechanisms of pathology. The student is expected to:
- (A) describe abnormal biological and chemical processes at the cellular level;
 - (B) examine and analyze changes resulting from mutations and neoplasms by examining cells, tissues, organs, and systems;
 - (C) investigate factors that contribute to disease, including age, gender, environment, lifestyle, and heredity; and
 - (D) analyze and describe how the body's compensating mechanisms attempt to maintain homeostasis when changes occur.
- (7) The student examines the process of pathogenesis. The student is expected to:

- (A) differentiate and identify pathogenic organisms using microbiological techniques such as gram staining, biochemical identification, and microscopic observation;
 - (B) research and summarize the stages of pathogenesis, including incubation period, prodromal period, and exacerbation or remission;
 - (C) analyze the body's natural defense systems against infection, including barriers, the inflammatory response, and the immune response;
 - (D) analyze other mechanisms of disease prevention and treatment such as vaccinations, antibiotics, chemotherapy, and immunotherapy; and
 - (E) evaluate the effects of chemical agents, environmental pollution, and trauma on the disease process.
- (8) The student examines diseases throughout the body's systems. The student is expected to:
- (A) investigate the etiology, signs and symptoms, diagnosis, prognosis, and treatment of diseases;
 - (B) explore and describe advanced technologies for the diagnosis and treatment of disease;
 - (C) research and describe reemergence of diseases such as malaria, tuberculosis, polio, and measles;
 - (D) research and differentiate between the causes, prevention, and impact of nosocomial infections versus community-acquired infections;
 - (E) research and describe antibiotic-resistant diseases such as methicillin-resistant *Staphylococcus aureus*;
 - (F) differentiate between various types of diseases and disorders, including hereditary, infectious, and auto-immune; and
 - (G) investigate ways diseases such as diabetes, Parkinson's, lupus, and congestive heart failure affect multiple body systems.
- (9) The student integrates the effects of disease prevention and control. The student is expected to:
- (A) evaluate public health issues related to asepsis, isolation, immunization, and quarantine;
 - (B) analyze the effects of stress and aging on the body;
 - (C) analyze patient medical data and interpret medical laboratory test results to inform diagnosis and treatment;
 - (D) analyze and interpret epidemiological data to determine common trends and predict outcomes in disease progression;
 - (E) research and summarize diseases that threaten world health and propose intervention strategies; and
 - (F) develop a prevention plan that considers how behaviors contribute to lifestyle diseases.

§127.425. Pharmacy I (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
 - (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.

- (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 10 and 11. Recommended prerequisites: Introduction to Pharmacy Science or Principles of Health Science and one credit in biology. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) The goal of Pharmacy I is for the student to gain a strong foundation in the knowledge and skills needed to pursue a career in the pharmaceutical field (e.g., pharmacy technician, pharmacist). Knowledge includes pharmacology, pharmacy law, medication safety, the dispensing process, and inventory. Pharmacy I is designed to be the second course in a pathway leading to college and career readiness in the healthcare therapeutics professions. The course content aligns with the competencies of pharmacy technician certification examinations.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student exhibits personal and interpersonal knowledge and skills. The student is expected to:
 - (A) model ethical conduct in complex situations;
 - (B) model a respectful and professional attitude when interacting with diverse patient populations, colleagues, and professionals;
 - (C) apply self-management skills such as stress and change management;
 - (D) apply interpersonal skills, including negotiation skills, conflict resolution, customer service, and teamwork;
 - (E) practice problem-solving skills in respect to complex ethical decision making; and
 - (F) compare unethical and illegal conduct in the workplace.
 - (2) The student communicates effectively with diverse populations. The student is expected to:
 - (A) practice a respectful and professional attitude when interacting with diverse patient populations, colleagues, and professionals; and
 - (B) compare communication techniques that are effective for various population clients such as terminally ill, intellectually disabled, visually/hearing impaired, and elderly/pediatric populations.
 - (3) The student interprets pharmacy correspondence utilizing medical abbreviations and terminology typically found in the pharmacy setting. The student is expected to:

- (A) employ pharmacy terminology and abbreviations in creating and utilizing correspondence in the pharmacy such as prescriptions, medication administration records (MARs), and patient order sheets;
 - (B) compare terminology typically used in the community and institutional pharmacy settings; and
 - (C) translate sig codes and abbreviations used in the pharmacy.
- (4) The student distinguishes between the requirements of various federal agencies. The student is expected to:
- (A) explain the handling and disposal of non-hazardous, hazardous, and pharmaceutical substances and waste;
 - (B) discuss the requirements for controlled substance prescriptions, including new, refill, and transfer prescriptions, according to the Drug Enforcement Administration (DEA) controlled substances schedules;
 - (C) describe Food and Drug Administration (FDA) recall requirements based on classification for medications, devices, supplies, and supplements;
 - (D) interpret and apply state and federal laws pertaining to processing, handling, and dispensing of medications, including controlled substances;
 - (E) interpret state and federal laws and regulations pertaining to pharmacy technicians; and
 - (F) explain pharmacy compliance with professional standards and relevant legal, regulatory, formulary, contractual, and safety requirements.
- (5) The student recalls drug information. The student is expected to:
- (A) identify brand name, generic name, classification, and indication of use for common medications with automaticity;
 - (B) discuss common and life-threatening drug interactions and contraindications;
 - (C) identify narrow therapeutic index (NTI) medications; and
 - (D) access and use references such as United States Pharmacopeia (USP) standards, drug reference books, and clinical information sources as needed to perform job duties.
- (6) The student explains the dispensing process. The student is expected to:
- (A) identify a prescription or medication order for completeness, including drug strength, dosage form, directions, quantity, and refills, and obtain missing information if needed;
 - (B) communicate with patients to obtain information, including demographics, medication history, health conditions, allergies, and insurance, for the patient profile;
 - (C) practice assisting pharmacists in collecting, organizing, and recording demographic and clinical information for the *Pharmacists' Patient Care Process*;
 - (D) perform the necessary mathematical calculations required for order entry, including formulas, ratios, concentrations, percent strength, dilutions, proportions, and allegations;
 - (E) identify equipment and supplies, including diabetic supplies, spacers, and oral/injectable syringes, required for drug administration based on the package size and unit dose;
 - (F) identify and describe the importance of lot numbers, expiration dates, and National Drug Codes (NDC) on drug packaging;
 - (G) practice and adhere to effective infection control procedures;
 - (H) apply appropriate cleaning standards, including hand washing and cleaning counting trays, countertops, and equipment; and

- (I) explain the state pharmacy boards' roles in the regulation of pharmacy technicians and that differences exist between states in the processing, handling, and dispensing of prescription medications.
- (7) The student identifies common medication errors and explains error prevention strategies. The student is expected to:
 - (A) identify high-alert/risk and look-alike/sound-alike (LASA) medications;
 - (B) describe error prevention strategies, including using Tall Man lettering, trailing/leading zeros, and barcodes; separating inventory; and limiting use of error-prone abbreviations;
 - (C) describe types of prescription errors, including abnormal doses, early refill, incorrect quantity, incorrect patient, and incorrect drug;
 - (D) explain pharmacy professional standards for and the role of the pharmacy technician in the patient care process;
 - (E) identify opportunities to assist pharmacists in the identification of patients who desire or require counseling to optimize the use of medications, equipment, and devices;
 - (F) discuss the pharmacy technician's role in patient and medication safety practices such as how to calculate dosage of pediatric over-the-counter drugs;
 - (G) explain how pharmacy technicians assist pharmacists in responding safely and legally to emergent patient situations; and
 - (H) explain basic safety and emergency preparedness procedures applicable to pharmacy services.
- (8) The student performs inventory procedures according to federal, state, local, and facility guidelines. The student is expected to:
 - (A) identify proper storage for medications in regard to temperature, light sensitivity, product demand, fast movers, cost, and restricted access;
 - (B) explain the definition and purpose of a formulary or approved/preferred product list;
 - (C) describe procedures for inventory control, including removal of expired/recalled drug products, rotating inventory, performing a physical inventory, ordering medications/supplies, monitoring periodic automatic replenishment (PAR) levels, and using just-in-time ordering;
 - (D) explain accepted procedures in purchasing pharmaceuticals, devices, and supplies; and
 - (E) explain accepted procedures for identifying and disposing of expired medications.

§127.426. Pharmacy II (Two Credits), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
 - (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the

commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.

(b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: Algebra I, Introduction to Pharmacy Science, and Pharmacy I. Students shall be awarded two credits for successful completion of this course.

(c) ~~(b)~~ Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
- (3) The Pharmacy II course provides students with the advanced knowledge and skills to explore various careers in the pharmacy field, including pharmacology, pharmacy law, medication errors, inventory pharmacy calculations, compounding, and workflow expectations in a pharmacy setting. Pharmacy II is designed to be the third course in a pathway leading to college and career readiness in the healthcare therapeutics professions. The course content aligns with the competencies of pharmacy technician certification examinations.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(c)~~ Knowledge and skills.

- (1) The student exhibits personal and interpersonal knowledge and skills. The student is expected to:
 - (A) apply appropriate verbal communication in a clear, concise, and effective manner;
 - (B) apply appropriate non-verbal communication in a clear, respectful, and effective manner;
 - (C) apply appropriate adaptability skills such as problem solving and creative thinking;
 - (D) create or evaluate a career plan using methods such as identifying educational pathways, developing career goals, and assessing individual aptitudes;
 - (E) demonstrate teamwork;
 - (F) create an occupation-specific resume; and
 - (G) identify soft skills desired by employers.
- (2) The student communicates effectively with diverse populations. The student is expected to:
 - (A) practice a respectful and professional attitude in communications with diverse patient populations, colleagues, and professionals such as written, oral, and electronic communications;
 - (B) demonstrate communication techniques that are effective for various population such as terminally ill, intellectually disabled, visually/hearing impaired, and elderly/pediatric populations; and
 - (C) demonstrate skills for supporting communication between various stakeholders such as serving as a liaison between the nurse and the patient.
- (3) The student demonstrates the use of medical terminology and abbreviations in a pharmacy setting. The student is expected to:

- (A) interpret and translate prescription and medication orders according to pharmacy settings such as community and hospital environments;
 - (B) create pharmacy correspondence such as prescriptions, medication administration records (MARs), and patient order sheets using medical terminology and abbreviations;
 - (C) use medical terminology found in various pharmacy settings to communicate appropriately; and
 - (D) translate sig codes and abbreviations used in the pharmacy to communicate instructions to patients.
- (4) The student applies the strictest requirements using the laws of local, state, and federal agencies. The student is expected to:
- (A) demonstrate the proper handling and disposal of non-hazardous, hazardous, and pharmaceutical substances and waste;
 - (B) apply the requirements for controlled substance prescriptions, including new, refill, and transfer prescriptions;
 - (C) apply the requirements for receiving, storing, ordering, labeling, and dispensing controlled substances and the reverse distribution, take-back, and loss or theft of controlled substances;
 - (D) classify controlled substances such as cocaine, heroin, marijuana, fentanyl, dextroamphetamine, amphetamine salts, benzodiazepines, and anabolic steroids according to their Drug Enforcement Administration (DEA) schedules;
 - (E) identify the federal requirements for restricted drugs such as pseudoephedrine and related medication processing programs such as Risk Evaluation and Mitigation Strategies (REMS) and iPLEDGE;
 - (F) demonstrate the process for Food and Drug Administration (FDA) recalls based on classification for medications, devices, supplies, and supplements; and
 - (G) explain pharmacy compliance with professional standards such as scope of practice and relevant legal, regulatory, formulary, contractual, and safety requirements.
- (5) The student interprets drug information. The student is expected to:
- (A) apply knowledge of brand name, generic name, classification, and indication of use for common medications such as the top 200 drugs with automaticity in a pharmacy setting;
 - (B) analyze the common and life-threatening drug interactions and contraindications such as drug-disease, drug-drug, drug-lab, and drug-food;
 - (C) apply knowledge of the narrow therapeutic index (NTI) to drug use evaluations; and
 - (D) integrate the use of digital and hard copy references such as United States Pharmacopeia (USP) standards, drug reference books, and clinical information sources as needed to perform job duties.
- (6) The student demonstrates the dispensing process in various pharmacy settings. The student is expected to:
- (A) analyze a prescription and medication order for completeness, including drug strength, dosage form, directions, quantity, date, and refills, and obtain missing information if needed;
 - (B) communicate with patients or care givers using the appropriate modality to obtain information, including demographics, medication history, health conditions, allergies, and insurance, for the patient profile;

- (C) collect, organize, and record demographic and clinical information accurately for patient continuity of care;
 - (D) identify the required steps in preparing sterile compounded products, including donning personal protective equipment (PPE), cleaning the vertical or horizontal flow hoods, selecting correct supplies, and preparing the product for dispensing;
 - (E) select the appropriate equipment and supplies, including diabetic supplies, spacers, and oral/injectable syringes, for drug administration based on package size and unit dose;
 - (F) apply lot numbers, expiration dates, and National Drug Codes (NDC) on drug packaging for the dispensing of medication; and
 - (G) differentiate between the use of effective infection control procedures such as sterile and non-sterile compounding in various pharmacy related settings.
- (7) The student analyzes common medication errors and practices error prevention strategies. The student is expected to:
- (A) use knowledge of high alert/risk and look-alike/sound-alike (LASA) medications to prevent medication errors;
 - (B) apply knowledge of current error prevention strategies such as using Tall Man lettering, trailing/leading zeros, and barcodes; separating inventory; and limiting use of error-prone abbreviations to prevent medication errors;
 - (C) apply knowledge of various prescription errors such as abnormal dose, early refill, incorrect quantity, incorrect patient, and incorrect drug for improved accuracy;
 - (D) demonstrate how to assist pharmacists in recognizing issues that require intervention such as adverse drug events, drug utilization review (DUR), and use of equipment and devices; and
 - (E) demonstrate knowledge of medication errors such as near miss and adverse events and various reporting procedures such as MedWatch, vaccine adverse event reporting system (VAERS), and route-cause analysis (RCA).
- (8) The student applies pharmacy workflow procedures according to federal, state, local, and facility guidelines. The student is expected to:
- (A) describe the process for creating a prescription or medication order in compliance with pharmacy standards such as standards for patient rights, completeness of a prescription or medication order, and authorization;
 - (B) discuss the steps in verifying a prescription or medication order such as right patient, right drug, right dosage, right time, and right route;
 - (C) identify the proper procedures for entering a prescription or medication order, including procedures for workstation, use of technology, validation with drug enforcement administration (DEA) calculations, and transcribing such as using military time and Roman numerals;
 - (D) apply the proper techniques for filling a prescription or medication order such as techniques for use of technology, counting, and selecting the correct medication;
 - (E) explain the proper procedure for the administration of prescription or medication orders such as ear drops, eye drops, inhalations, parenteral, and enteral;
 - (F) demonstrate knowledge of the workflow process for prescriptions and medication orders such as creation of the order, order entry, adjudication, verification, filling, labeling, billing, dispensing, and administration; and

- (G) describe the elements of third-party billing for out-patient dispensing, including prescription insurance ID cards, group numbers, BIN numbers, prior authorization, quantity limits, patient co-pays, maximum out-of-pocket costs, and deductibles.
- (9) The student evaluates mathematical process standards related to the practice of pharmacy. The student is expected to:
- (A) calculate dosage calculations for adults and special populations using conversions, ratios, and dimensional analysis to perform duties in a pharmacy setting;
 - (B) apply conversions to systems of measurements, including apothecary, metric, and household, to perform duties in a pharmacy setting;
 - (C) calculate the flow rate (or rate of administration) for an IV solution using ratios and conversions such as milliliters to drops, weight, or hours to minutes;
 - (D) calculate days supply for a prescription order given a dose and sig;
 - (E) calculate volume or mass of each of the total parenteral nutrition (TPN) components such as lipids, amino acids, dextrose, calcium, and magnesium;
 - (F) calculate volume or mass of ingredients needed for compounding both sterile and non-sterile products;
 - (G) calculate amount needed for percent of weight-to-volume, volume-to-volume, and weight-to-weight based on stock concentration; and
 - (H) use calculations related to business math in a pharmacy setting, including profit, net profit, discounts, mark-ups, dispensing fee, average wholesale price, depreciation, and third-party.
- (10) The student demonstrates the use of technology in a pharmacy setting. The student is expected to:
- (A) identify the types and uses of automated dispensing technology such as cabinets, units, and carousels;
 - (B) demonstrate knowledge and components of pharmacy dispensing software used in the out-patient setting, the in-patient setting, and in-office use dispensing;
 - (C) apply professional standards using communication technology such as telephone, emails, fax, electronic prescriptions, and social media appropriate for a pharmacy setting;
 - (D) apply knowledge of technology hardware devices for input and output such as computers, scanners, printers, interface devices, and other devices; and
 - (E) select and use appropriate technology tools to search for drug information such as pill identification, adverse events, and contraindications.
- (11) The student uses critical thinking, scientific reasoning, research, or problem solving to make informed decisions and communicate within and outside the classroom. The student is expected to:
- (A) critique the validity and reliability of scientific research such as assessing for bias, conflict of interest, and study design;
 - (B) demonstrate the ability to independently find valid and reliable sources such as primary, secondary, and tertiary literature;
 - (C) identify safe use of online resources that maintain the privacy and confidentiality of the user and patient;
 - (D) analyze online resources used in scientific research;
 - (E) describe the recent innovations and advances in pharmacy;

- (F) identify opportunities for extended learning experiences such as community services, career and technical service organizations (CTSOs), and professional organizations; and
 - (G) evaluate scientific information extracted from various sources such as accredited scientific journals, institutions of higher learning, current events, news reports, published journal articles, and marketing and promotional materials.
- (12) The student performs inventory procedures according to federal, state, local, and facility guidelines. The student is expected to:
- (A) analyze proper storage for medications in regard to temperature, light sensitivity, product demand, cost, and restricted access;
 - (B) analyze therapeutic substitutions and product selection using the knowledge of formularies or preferred product list;
 - (C) practice procedures for inventory control such as removal of expired/recalled drug products, rotating inventory, performing a physical inventory, and ordering medications/supplies;
 - (D) explain how just-in-time or drop ship ordering and periodic automatic replenishment (PAR) levels are used to maintain pharmacy inventory;
 - (E) analyze how laws affect the procedures for purchasing or ordering medications, devices, and supplies; and
 - (F) analyze lot numbers, expiration dates, and National Drug Codes (NDC) on drug packaging for inventory accuracy.
- (13) The student demonstrates knowledge of safety procedures in a pharmacy setting. The student is expected to:
- (A) apply appropriate hygiene and cleaning standards, including hand washing and cleaning counting trays, countertops, and equipment;
 - (B) perform basic safety and emergency preparedness procedures such as basic life support (BLS) and first aid applicable to pharmacy services;
 - (C) explain the risks of drug diversion to employees, patients, and the community;
 - (D) explain the potential solutions to minimize drug diversion such as identifying red flags, controlling inventory, and monitoring the prescription drug monitoring program (PDMP);
 - (E) explain the types and uses of personal protective equipment (PPE) and the steps for donning and doffing PPE; and
 - (F) explain why collecting and documenting patient allergies are important steps in medication safety.

§127.427. Medical Assistant (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
- (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If

the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.

(b) [(a)] General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite or corequisite: Anatomy and Physiology. Recommended prerequisite: Medical Terminology. Students shall be awarded one credit for successful completion of this course.

(c) [(b)] Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.
- (3) The Medical Assistant course provides students with the knowledge and skills to pursue a career as a medical assistant and to improve college and career readiness. Students will obtain communication skills, clinical ethics knowledge, safety awareness, and information related to medical assisting career opportunities.
- (4) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
- (5) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.
- (6) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (7) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) [(c)] Knowledge and skills.

- (1) The student applies professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) apply appropriate verbal communication in a clear, concise, and effective manner;
 - (B) apply appropriate non-verbal communication in a clear, respectful, and effective manner;
 - (C) apply appropriate adaptability skills such as problem solving and creative thinking;
 - (D) create or evaluate a career plan using methods such as identifying educational pathways, professional organizations, career goals, continuing education opportunities, and individual aptitudes;
 - (E) demonstrate teamwork;
 - (F) create an occupation-specific resume; and
 - (G) identify and demonstrate soft skills desired by employers in health care.
- (2) The student evaluates the roles and responsibilities of the medical assistant as a member of the healthcare team. The student is expected to:
 - (A) explain the role of the medical assistant in various healthcare settings;
 - (B) discuss the scope of practice, including responsibilities and limitations of a medical assistant;

- (C) explain the level of authority within the healthcare professional hierarchy; and
- (D) identify the members of an interdisciplinary healthcare team and their roles such as licensed vocation nurse, registered nurse, primary care provider, specialists, and other allied health professionals.
- (3) The student applies professional communication skills to provide information to patients and team members in a healthcare setting. The student is expected to:
 - (A) demonstrate the ability to report abnormal results in writing and orally to the patient's provider;
 - (B) demonstrate how to communicate with patients, caregivers, and the interdisciplinary team to assist in the planning, delivery, and coordination of patient-centered care;
 - (C) evaluate different communication techniques for responding to the needs of individuals in a diverse society;
 - (D) practice conflict-resolution techniques such as cooperation, contribution, compromise, and collaboration in various situations; and
 - (E) practice providing patient education on health-related topics such as clean catch urine collection, the risks and benefits of vaccinations, use of a peak-flow, and nebulizer treatments.
- (4) The student demonstrates knowledge of healthcare ethical principles in their practice of medical assisting. The student is expected to:
 - (A) evaluate principles of ethical behavior, including beneficence, non-maleficence, justice, and autonomy;
 - (B) debate ethical issues related to technological advances in health care such as stem cells, robotics, and immunologic therapies in health care;
 - (C) evaluate ethical issues and legal ramifications related to malpractice, negligence, and liability; and
 - (D) summarize legal and ethical standards, including Patient Bill of Rights, Advanced Directives, and the Health Insurance Portability and Accountability Act (HIPAA).
- (5) The student demonstrates knowledge of the administrative duties of a medical assistant in a healthcare setting. The student is expected to:
 - (A) identify considerations for scheduling a patient such as availability of test results, availability of staff, patient flow, triage, and coordination of care;
 - (B) discuss considerations related to managing an office schedule such as types of scheduling, under booking, over booking, cancellations, add-ons, and no-shows;
 - (C) define the terms used in medical billing such as diagnosis codes, billing codes, billing cycle, co-pay, deductibles, maximum out-of-pocket, and time of service;
 - (D) describe the elements of completing patient registration such as recording demographics, emergency contact, and insurance information;
 - (E) analyze different types of health insurance coverage, including Medicare, Medicaid, TRICARE, Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA), private insurance, employer-based insurance, and workers' compensation;
 - (F) identify the components of an insurance card such as plan name, group number, ID number, patient co-pay, co-insurance, and phone numbers;
 - (G) define insurance plan terminology such as prior authorization, formulary, explanation of benefits, denial, appeal, and referrals;

- (H) define electronic health records systems and their components such as demographics, financial insurance information, orders and referrals, correspondence, and test results; and
 - (I) analyze the benefits and risks of electronic health records systems.
- (6) The student uses appropriate medical terminology as a medical assistant. The student is expected to:
 - (A) use directional terms and anatomical planes related to body structure;
 - (B) use occupationally specific terms such as terms relating to the body systems, surgical and diagnostic procedures, diseases, and treatment; and
 - (C) apply knowledge of prefixes, suffixes, and root words to translate medical terms to conversational language to facilitate communication.
- (7) The student practices or models patient intake skills as a medical assistant. The student is expected to:
 - (A) collect and document patient information during an intake interview, including chief complaint; patient care team; past medical, surgical, social, and family histories; patient allergies; and comprehensive medication list;
 - (B) explain how to use a medical chart to identify patient care needs;
 - (C) identify normal ranges for vital signs per age group, including blood pressure, temperature, heart rate, respiratory rate, and oxygen saturation;
 - (D) measure and record accurate vital signs, including manual blood pressure, temperature, heart rate, respiratory rate, and pain scale;
 - (E) measure and record accurate anthropometric measurements, including height, weight, and head circumference; and
 - (F) calculate accurate conversions between different units of measurement such as kilograms to pounds, centimeters to inches, and Fahrenheit to Celsius.
- (8) The student demonstrates knowledge and application of point of care testing as a medical assistant. The student is expected to:
 - (A) define point of care testing;
 - (B) identify and correlate specimen types and collection methods, including throat swabs, capillary blood, and urine used in point of care testing;
 - (C) describe tests that might be performed as a point of care test in an office such as rapid strep, rapid flu, glucose, urine dip, urine pregnancy, vision screening, and electrocardiogram (EKG) tests;
 - (D) perform and document a vision screening using the Snellen eye chart; and
 - (E) locate landmarks for performing a 12-lead electrocardiogram (EKG).
- (9) The student demonstrates knowledge of medication preparation and administration in a clinical setting specific to the role of a medical assistant. The student is expected to:
 - (A) apply the six rights of medication administration, including right patient, right medication, right dose, right time, right route, and right documentation;
 - (B) identify drug classifications and the indication for use;
 - (C) define drug-related terms, including adverse event, therapeutic response, side effect, drug interactions, and allergic reaction;
 - (D) calculate the amount of medication to administer based on the dosage ordered and the strength of medication supply on hand;

- (E) evaluate a patient for known allergies and contraindications prior to administering any medication;
 - (F) identify routes of medication administration, including oral, buccal, sublingual, inhaled, intranasal, otic, ophthalmic, intravaginal, anal, topical, transdermal, intradermal, subcutaneous, intramuscular, intravenous, and intrathecal;
 - (G) use proper technique when preparing medications for administration, including injections, oral, sublingual, inhaled, otic, ophthalmic, and topical;
 - (H) use proper technique when administering medications, including injections, oral, sublingual, inhaled, otic, ophthalmic, and topical;
 - (I) identify appropriate muscle groups for intramuscular injections, including deltoid, vastus lateralis, and ventrogluteal;
 - (J) explain the factors that influence intramuscular injection site selection, including patient size, patient age, viscosity of medication, and muscular density;
 - (K) explain the factors that affect needle size and gauge selection, including medication viscosity, patient size, muscular density; and
 - (L) demonstrate knowledge of syringe styles and markings on various size syringes such as Luer Lock, oral, insulin, TB, 1ml, 3ml, 5ml, and 10ml syringes.
- (10) The student demonstrates knowledge of collecting, labeling, storing, and transferring lab specimens. The student is expected to:
- (A) identify how to properly store and transfer lab specimens such as blood, urine, fecal, and sputum samples;
 - (B) list the proper order of draw for blood collection tubes;
 - (C) select the proper collection tubes for specific types of blood tests such as complete blood count (CBC), comprehensive metabolic panel (CMP), and lipid panel;
 - (D) locate veins used for blood draws;
 - (E) demonstrate proper technique and post procedural care for venous blood draws; and
 - (F) demonstrate proper labeling of lab specimens, including patient name, date of birth, source, date, time, and initials of collector.
- (11) The student demonstrates knowledge of patient populations and their specific care considerations. The student is expected to:
- (A) discuss and identify stages of development throughout a patient's lifespan;
 - (B) describe coping and defense mechanisms exhibited by patients such as emotion-focused behaviors, problem-focused behaviors, denial, displacement, intellectualization, projection, rationalization, and regression;
 - (C) identify and discuss end-of-life considerations such as advanced directives, power of attorney, stages of grief, and family support;
 - (D) practice appropriate methods of care for working with patients with mental, physical, and developmental disabilities;
 - (E) explain how socioeconomic factors such as income, transportation, access to community resources, employment, and education level can influence patient outcomes; and
 - (F) explain how various multicultural values can affect patient care decisions.
- (12) The student demonstrates knowledge of safety practices and procedures as related to medical assisting. The student is expected to:
- (A) employ standard precautions in a healthcare scenario;

- (B) identify various modes of disease transmission, including vector borne, air borne, direct or indirect contact, and vehicle;
- (C) distinguish between the types of isolation precaution signage used to address modes of disease transmission such as contact, droplet, and airborne;
- (D) identify personal protective equipment (PPE);
- (E) apply the knowledge of PPE used in various situations such as venipuncture, collecting a throat swab, or dipping urine;
- (F) demonstrate proper donning and doffing of PPE;
- (G) define the use of a sharps container, biohazard container, shredding bin, and trash receptacle;
- (H) practice safe handling of sharps such as not recapping after injection and prompt disposal in a sharps container;
- (I) identify symptoms of anaphylaxis and the proper emergency response;
- (J) explain storage requirements for medications, vaccines, and lab specimens;
- (K) locate and use the safety data sheets (SDS) to retrieve information such as proper storage, clean up, and exposure response; and
- (L) define and apply knowledge of medical asepsis.

§127.428. Pharmacology (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2023-2024 school year.
 - (1) No later than August 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2023-2024 school year and apply to the 2023-2024 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: a course from the Health Science Career Cluster. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) The Pharmacology course is designed to study how natural and synthetic chemical agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in

providing quality health care. It is an ever-changing, growing body of information that continually demands greater amounts of time and education from healthcare workers.

- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student applies professional standards/employability skills as required by the healthcare system. The student is expected to:
 - (A) apply appropriate verbal and non-verbal communication in a clear, concise, and effective manner;
 - (B) apply appropriate adaptability skills such as problem solving and creative thinking;
 - (C) create and evaluate a career plan using methods such as educational pathways, career goals, and individual aptitudes;
 - (D) demonstrate teamwork;
 - (E) create an occupation-specific resume; and
 - (F) identify and apply soft skills desired by employers.
- (2) The student explores the field and foundation of pharmacology. The student is expected to:
 - (A) differentiate between pharmacology subdivisions, including pharmacodynamics, pharmacokinetics, pharmaceuticals, and pharmacotherapeutics;
 - (B) use common drug information materials such as accredited scientific journals, institutions of higher learning, current events, news reports, published journal articles, textbooks, and marketing materials;
 - (C) list examples of primary, secondary, and tertiary drug information references;
 - (D) research and describe the history of pharmacy and contributions of the field;
 - (E) draw inferences based on data from promotional materials for products and services;
 - (F) analyze the societal impact of medication costs; and
 - (G) evaluate the impact of scientific research on society, including drug development and the natural environment, including drug disposal.
- (3) The student identifies careers associated with pharmacology. The student is expected to:
 - (A) evaluate career pathways utilizing pharmacology;
 - (B) define the role of the pharmacy team; and
 - (C) research and describe emerging opportunities within the pharmacy profession.
- (4) The student explains the ethical and legal responsibilities associated with pharmacology. The student is expected to:
 - (A) explain the causes, effects, and consequences associated with medical errors, including medication errors;
 - (B) define legal terminology associated with medical errors such as negligence, product liability, contributory negligence, and regulatory law;
 - (C) analyze the principles of medical ethics, including beneficence, autonomy, maleficence, and justice; and
 - (D) evaluate professional liability.

- (5) The student uses medical terminology to communicate effectively with other healthcare professionals, patients, and caregivers. The student is expected to:
- (A) use the appropriate medical terminology to identify different classes of drugs;
 - (B) communicate using medical terminology associated with pharmacology;
 - (C) analyze unfamiliar terms using the knowledge of word roots, suffixes, and prefixes; and
 - (D) interpret medical terminology to communicate with patients and caregivers.
- (6) The student demonstrates mathematical knowledge and skills to solve problems with systems of measurement used in the pharmacy. The student is expected to:
- (A) calculate medication dosages using formulas, ratios, proportions, and allegations;
 - (B) convert a measurement expressed in one standard unit within a system to a measurement expressed in another unit within the same system;
 - (C) convert a measurement expressed in one system to a unit of the same measurement in a different system, including metric, apothecary, avoirdupois, and household systems; and
 - (D) evaluate statistical data and its limitations such as patient compliance, study design, and controls.
- (7) The student evaluates pharmaceutical agents, their dosage form, and routes of administration. The student is expected to:
- (A) analyze the availability of different dosage forms such as solid, liquid, patch, and IV solution;
 - (B) give examples of the brand or generic names of drugs such as the top 200 drugs in each dosage form and routes of drug administration;
 - (C) define medical terminology associated with drug dosage forms;
 - (D) explain the difference between therapeutic effects, side effects, and toxic effects;
 - (E) identify the mechanism of action of different drug classifications such as drug receptors, agonists, and antagonist relationships;
 - (F) explain the dose response relationship concept such as the difference between oral and IV administration of drugs and explain the relationship between drug dosage, drug response, and time; and
 - (G) explain drug safety practices such as monitoring expiration dates and drug disposal.
- (8) The student demonstrates knowledge and use of appropriate equipment, instruments, and technology. The student is expected to:
- (A) identify technology components used in the pharmacy workflow such as ordering, entering, filling, and dispensing;
 - (B) describe how technology applications improve efficiency in the pharmacy; and
 - (C) identify and demonstrate proper use and maintenance of equipment and instruments used in a pharmacy setting such as IV drop sets, scales, glucose supplies, dispensing units or cabinets, and other laboratory supplies.
- (9) The student practices safe protocols in preventing personal and client illness or injury. The student is expected to:
- (A) employ safety standards such as workplace standards;
 - (B) interpret and apply pharmacy standards according to the strictest local, state, or federal regulations to enhance safety;
 - (C) examine the consequences of unsafe practices; and

- (D) demonstrate safe procedures in the administration of client care in a simulated or clinical setting.

§127.429. Respiratory Therapy I (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.

- (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
- (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
- (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.

- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite or corequisite: Anatomy and Physiology. Recommended prerequisite: a course from the Health Science Career Cluster. Students shall be awarded one credit for successful completion of this course.

- (c) ~~(b)~~ Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
- (3) Respiratory Therapy I is a technical lab course that addresses knowledge and skills related to cardiopulmonary medicine. Respiratory therapists are specialized healthcare practitioners trained in cardiopulmonary medicine to work therapeutically with people suffering from cardiopulmonary diseases. Students will learn basic knowledge and skills performed by respiratory therapists using equipment such as: stethoscopes, sphygmomanometers, thermometers, pulse oximeters, oxygen delivery devices (nasal cannula, masks of various types), nebulizers, and airway clearance and hyperinflation therapy devices.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations, including:
- (A) work-based experiences/learning; and
- (B) volunteering/shadowing opportunities.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

- (d) ~~(c)~~ Knowledge and skills.

- (1) The student demonstrates professional standards and employability skills required by the respiratory therapy profession. The student is expected to:
- (A) model professionalism associated with respiratory therapy such as adaptability, time management, punctuality, appreciation for diversity, decision-making, dedication, and organizational and leadership skills;

- (B) demonstrate effective verbal and non-verbal communication in a clear and concise manner;
 - (C) demonstrate therapeutic communication appropriate to the situation, including communication with individuals with language differences/barriers and sensory loss;
 - (D) evaluate the effectiveness of conflict resolution techniques in various situations; and
 - (E) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team.
- (2) The student applies mathematics, science, English language arts, and social studies in respiratory therapy. The student is expected to:
- (A) interpret complex technical material related to respiratory therapy;
 - (B) identify the impact of cultural diversity on patient care such as differences in race, culture, and religion;
 - (C) solve mathematical calculations related to respiratory therapy; and
 - (D) summarize biological and chemical processes that maintain homeostasis.
- (3) The student investigates the history and profession of respiratory therapy, including education and licensure. The student is expected to:
- (A) analyze the advancement of respiratory therapy practices over time;
 - (B) summarize the roles of respiratory therapists in various settings; and
 - (C) identify academic requirements for respiratory therapist and professional advancement opportunities such as professional organizations, credentials, certifications, registrations, licensure, continuing education, and advanced degrees.
- (4) The student applies regulatory and safety standards in a respiratory therapy setting. The student is expected to:
- (A) identify and conform to regulations and guidelines from entities such as the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), The Joint Commission, the National Institute of Health (NIH), Texas Commission on Environmental Quality (TCEQ), Texas Department of State and Health Services (DSHS), and American Association for Respiratory Care (AARC);
 - (B) identify infection control standard and transmission-based precautions in the patient care setting, including hand hygiene, equipment sterilization, and the use of personal protective equipment (PPE); and
 - (C) identify industry safety standards, including standards for body mechanics, fire prevention, electrical safety, oxygen safety, and the handling of hazardous materials.
- (5) The student investigates the structure and function of cardiopulmonary anatomy. The student is expected to:
- (A) analyze the cardiovascular system, including ventricles, atrium, valves, blood vessels, nerves, blood flow, and cardiac conduction system;
 - (B) explain the respiratory system, including airways, trachea, lungs, and pulmonary vessels that aid the body in the exchange of gases;
 - (C) trace the blood flow through the cardiopulmonary system; and
 - (D) examine a variety of human diseases and disorders affecting the cardiopulmonary system such as chronic obstructive pulmonary disease (COPD), asthma, pneumonia, cystic fibrosis, and lung cancer.

- (6) The student develops knowledge pertaining to respiratory therapy procedures. The student is expected to:
- (A) demonstrate the use of breathing exercises for patients with cardiopulmonary disease such as pursed lipped breathing and diaphragmatic breathing;
 - (B) explain the use of hyperinflation and airway clearance therapies;
 - (C) explain the use of tracheostomy and endotracheal tubes and oral and nasal airway devices for assisted breathing;
 - (D) identify anatomy of the heart and lungs and proper endotracheal tube placement on X-ray;
 - (E) explain the use of oximetry and arterial blood-gases for patient assessment;
 - (F) identify and explain the use of the equipment for oxygen therapies such as nasal cannula, high flow nasal cannula, simple masks, air-entrainment masks, partial rebreather masks, and non-rebreather masks; and
 - (G) demonstrate the administration of oxygen therapy using oxygen concentrators and portable cylinders.
- (7) The student recognizes cardiopulmonary pharmaceutical agents and safety and protocol measures. The student is expected to:
- (A) identify medications used in respiratory therapy, including bronchodilators and inhaled corticosteroids;
 - (B) summarize indications, contraindications, and side effects of respiratory medications;
 - (C) discuss delivery of respiratory medications such as nebulizers and meter dose inhalers (MDI); and
 - (D) assess the impact of cardiopulmonary agents on vital signs.
- (8) The student implements the knowledge and skills of respiratory therapy professionals in a laboratory setting. The student is expected to:
- (A) demonstrate patient assessment of vital signs, including blood pressure, pulse, respiratory rate, temperature, oxygenation, and ventilation status;
 - (B) demonstrate patient positioning for respiratory comfort and procedures;
 - (C) demonstrate patient care techniques used in high stress respiratory therapy situations such as non-compliant, combative, and distressed patients; and
 - (D) demonstrate correct cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) skills.
- (9) The student evaluates ethical behavioral standards and legal responsibilities in the respiratory therapy profession. The student is expected to:
- (A) examine legal and ethical behavior standards such as the Patient's Bill of Rights, advanced directives, and the Health Insurance Portability and Accountability Act (HIPAA);
 - (B) investigate and discuss the legal and ethical ramifications of unacceptable behavior in therapeutic practice;
 - (C) research and describe role of professional associations and regulatory agencies; and
 - (D) describe ethical dilemmas in health care.

§127.430. Respiratory Therapy II (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2023-2024 school year.
- (1) No later than August 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2023-2024 school year and apply to the 2023-2024 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grade 12. Prerequisite: Respiratory Therapy I. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) Respiratory Therapy II is a technical lab course that addresses knowledge and skills related to critical care and cardiopulmonary medicine. Respiratory therapists are specialized healthcare practitioners trained in cardiopulmonary medicine to work therapeutically with people suffering from cardiopulmonary diseases. Students will learn advanced knowledge and skills performed by respiratory therapists using equipment such as stethoscopes, sphygmomanometers, thermometers, pulse oximeters and monitors, oxygen delivery devices (nasal cannula, masks of various types), nebulizers, airway clearance and hyperinflation therapy devices, spirometers, and intubation mannequin heads and equipment (endotracheal tubes, laryngoscopes, stylets).
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations, including:
 - (A) work-based experiences/learning; and
 - (B) volunteering/shadowing opportunities.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student demonstrates professional standards and employability skills required by the respiratory therapy profession. The student is expected to:
 - (A) model professionalism associated with respiratory therapy such as adaptability, time management, punctuality, appreciation for diversity, decision-making, dedication, and organizational and leadership skills;
 - (B) demonstrate effective verbal and non-verbal communication in a clear and concise manner;

- (C) demonstrate therapeutic communication appropriate to the situation, including communication with individuals with language differences or barriers and sensory loss;
 - (D) evaluate the effectiveness of conflict resolution techniques in various situations;
 - (E) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team; and
 - (F) explore career options for respiratory therapy and preparation necessary for employment such as creating a cover letter and resume, completing an application, and conducting mock interviews.
- (2) The student applies mathematics, science, English language arts, and social studies in respiratory therapy. The student is expected to:
- (A) analyze complex technical material related to respiratory therapy;
 - (B) analyze the impact of cultural diversity such as differences in race, culture, and religion on patient care;
 - (C) apply mathematical calculations related to respiratory therapy; and
 - (D) analyze biological and chemical processes that affect homeostasis in relation to cardiopulmonary diseases.
- (3) The student applies safety standards for a respiratory therapy setting. The student is expected to:
- (A) evaluate and apply standards and guidelines from entities, including the American Association for Respiratory Care (AARC), World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), U.S. Food and Drug Administration (FDA), and Texas Commission on Environmental Quality (TCEQ), as they apply to cardiopulmonary diseases;
 - (B) demonstrate infection control standard and transmission-based precautions in the laboratory setting, including hand hygiene, equipment sterilization, and the use of personal protective equipment (PPE); and
 - (C) model industry safety standards, including standards for body mechanics, fire prevention, electrical safety, oxygen safety, and the handling of hazardous materials.
- (4) The student explains the interactions between the cardiopulmonary and other body systems as they relate to wellness and diseases. The student is expected to:
- (A) analyze the role of the autonomic nervous system in the regulation of the cardiopulmonary system as it pertains to health and illness;
 - (B) analyze the role of the urinary system in the regulation of the acid-base and fluid balance and in cardiopulmonary health and illness;
 - (C) investigate the interactions between body systems and cardiopulmonary diseases and disorders such as Guillain-Barré syndrome, Myasthenia Gravis, SARS-CoV-2 (Covid), Idiopathic Pulmonary Fibrosis (IPF), adult respiratory distress syndrome (ARDS), and congestive heart failure (CHF);
 - (D) differentiate between normal heart rhythms and common cardiac dysrhythmias such as ventricular fibrillation, ventricular tachycardia, and asystole attributed to malfunctions in other body systems; and
 - (E) discuss the role of respiratory therapists in the use of mechanical systems, including non-invasive and invasive mechanical ventilators and extracorporeal membrane oxygenation (ECMO), when the cardiopulmonary system fails.
- (5) The student implements the knowledge and skills of a respiratory therapy professional used in a laboratory setting. The student is expected to:

- (A) demonstrate breathing exercises commonly used for patients with cardiopulmonary disease;
 - (B) demonstrate airway management skills in a laboratory setting using equipment for intubation and airway maintenance such as endotracheal and tracheostomy tubes, endotracheal/tracheal suction catheters, laryngoscopes, bag valve mask devices, oral and nasal airways, tube fasteners, or tape;
 - (C) demonstrate airway clearance and hyperinflation therapies in a laboratory setting using equipment such as oscillating positive end pressure devices, high frequency chest wall oscillation devices, and an incentive spirometer;
 - (D) differentiate between normal lung and pathology in a chest X-ray;
 - (E) recognize typical and atypical arterial blood-gas values related to patient oxygenation and ventilation status;
 - (F) demonstrate the use of the oxygen therapy equipment such as nasal cannula, high flow nasal cannula, simple masks, air-entrainment masks, partial rebreather masks, non-rebreather masks, and non-invasive ventilators;
 - (G) demonstrate patient assessment methods, including inspection, auscultation, palpitation, and percussion;
 - (H) interpret and create a basic care plan for asthma and chronic obstructive pulmonary disease (COPD);
 - (I) demonstrate the role of a respiratory therapist during simulated emergency situations such as situations requiring a rapid response team and advanced cardiac life support; and
 - (J) describe the respiratory therapists' role in patient education regarding the disease process and proper use of medication and respiratory equipment.
- (6) The student understands cardiopulmonary pharmaceutical agents and safety. The student is expected to:
- (A) research and identify the application of medications used in respiratory therapy, including bronchodilators, inhaled corticosteroids, mucolytics, biologics, inhaled antibiotics, inhaled pulmonary vasodilators, and antivirals;
 - (B) evaluate indications, contraindications, and side effects of respiratory medications;
 - (C) demonstrate delivery methods of medication such as nebulizers and meter dose inhalers (MDI); and
 - (D) evaluate patient response to therapy before, during, and after respiratory treatments such as heart rate, blood pressure, respiration, and breath sounds.
- (7) The student evaluates ethical behavioral standards and legal responsibilities in the respiratory therapy profession. The student is expected to:
- (A) analyze legal and ethical scenarios as it relates to the Patient's Bill of Rights and the Health Insurance Portability and Accountability Act (HIPAA);
 - (B) evaluate the legal and ethical ramifications of unacceptable behavior in therapeutic practice; and
 - (C) describe ethical dilemmas in respiratory therapy such as advanced directives, palliative care, hospice, and end-of-life care.
- (8) The student identifies academic preparation and skills necessary for employment in the field of respiratory therapy. The student is expected to:

- (A) research and identify academic requirements for professional advancement such as credentials, certifications, licensure, registration, continuing education, and advanced degrees; and
- (B) research and identify the path to obtain and maintain entry level licensure and credentialing.

§127.431. Leadership and Management in Nursing (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
 - (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: a course from the Health Science Career Cluster. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) This course is designed to explore leadership and management in nursing, studying topics such as ethics, educational levels, career paths, regulatory bodies, and personal and professional leadership skills.
 - (4) Students are encouraged to participate in extended learning experiences such as Health Occupations Students of America (HOSA), Skills USA, career and technical student organizations, and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
 - (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner; and
 - (B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team.
 - (2) The student understands the different educational levels of licensed nurses and applicable careers and career pathways. The student is expected to:

- (A) compare the differences between the educational requirements and roles of a licensed vocational nurse and a registered nurse;
 - (B) diagram the educational requirements of a registered nurse, including diploma, associate degree, bachelor's degree, master's degree, and doctoral degree;
 - (C) identify the different specializations of a nurse with a master's degree such as family nurse practitioner, nurse informaticist, nurse midwife, and nurse educator;
 - (D) differentiate the roles of the Doctor of Philosophy (PhD) and the Doctor of Nursing Practice (DNP) prepared nurse; and
 - (E) develop a six-year career plan in nursing.
- (3) The student understands the functions of leadership in nursing. The student is expected to:
- (A) illustrate or diagram the relationship and progression within the hierarchy of nursing leadership;
 - (B) identify critical skills and competencies for each level in the hierarchy of nursing leadership;
 - (C) present and examine the impact of each level of nursing in the hierarchy of leadership; and
 - (D) investigate and analyze different leadership styles and how they are used in different situations.
- (4) The student demonstrates personal and professional leadership qualities and competencies. The student is expected to:
- (A) identify different personal growth practices such as self-reflection, introspection, self-care, and journaling;
 - (B) describe and demonstrate intrapersonal skills such as empathy, patience, risk-taking, confidence, integrity, personal values and ethics, punctuality, and goal setting;
 - (C) examine personal and professional values and ethics;
 - (D) research and develop a plan to coach and mentor others; and
 - (E) evaluate decision-making processes such as delegation, problem-solving processes such as conflict management, and processes to support patient satisfaction, patient safety, and patient advocacy.
- (5) The student demonstrates the appropriate use of communication techniques. The student is expected to:
- (A) examine communication platforms and apply the appropriate professional response in different mediums such as telephone, email, text, electronic health records, and face to face;
 - (B) demonstrate professional written and verbal communication skills for individuals and teams using communication tools such as Situation Background Assessment and Recommendation (SBAR) and Acknowledge Introduce Duration Explanation and Thank you (AIDET);
 - (C) determine appropriate communication methods for urgent, emergent, and non-urgent situations such as team strategies and tools to enhance performance and patient safety (TeamSTEPPS); and
 - (D) demonstrate receiving and giving constructive criticism.
- (6) The student understands the definition and application of time management. The student is expected to:

- (A) demonstrate how to create an agenda that prioritizes tasks, duties, and responsibilities that must be completed, including required meetings and communications;
 - (B) differentiate goals that advance professional growth and responsibility and non-professional goals;
 - (C) identify factors that inhibit the good use of time and apply strategies that mitigate the loss of time; and
 - (D) demonstrate how to manage long- and short-term personal and professional schedules by creating and updating a yearly calendar.
- (7) The student understands how to build and manage interdisciplinary teams and facilitate teamwork. The student is expected to:
- (A) define and explain the purpose of an interdisciplinary team and the role of each member;
 - (B) develop a plan for creating a team through team-building exercises, culture and climate awareness, and interpersonal skills;
 - (C) define and apply techniques to manage personal conflict within teams; and
 - (D) describe the stages of team evolution such as forming, storming, norming, performing, and transforming.
- (8) The student understands regulatory agencies and boards and their related requirements. The student is expected to:
- (A) identify the role and responsibility of the Board of Nursing, including establishing graduation and licensure requirements;
 - (B) identify federal, state, and local regulatory agencies such as local hospital boards, Health and Human Services, The Joint Commission, and Center for Medicare and Medicaid Services;
 - (C) define and identify the nursing scope of practice;
 - (D) compare the difference between a certification and licensure; and
 - (E) compare the role of the Board of Nursing and professional nursing organizations.

§127.432. Practicum in Nursing (Two Credits), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2023-2024 school year.
- (1) No later than August 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2023-2024 school year and apply to the 2023-2024 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, one credit in chemistry, and at least one course from the Health Science Career Cluster. Recommended prerequisites: Science of Nursing, Medical Terminology, and Anatomy and Physiology. Students shall be awarded two credits for successful completion of this course.

(c) [(b)] Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
- (3) Practicum in Nursing is designed to give students practical applications of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.
- (4) To pursue a career in the nursing industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.
- (5) The health care industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students recognize the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science certification or licensure through further education and employment.
- (6) Professional integrity in the health care industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.
- (7) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (8) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) [(e)] Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner; and
 - (B) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team.
- (2) The student applies mathematics, science, English language arts, and social sciences in nursing. The student is expected to:
 - (A) solve mathematical calculations appropriate to situations in a health-related environment;
 - (B) communicate using medical terminology;
 - (C) express ideas in writing and develop skills in documentation;
 - (D) interpret complex technical material related to the health science industry;
 - (E) summarize biological and chemical processes that maintain homeostasis;
 - (F) explain changes in body structure due to trauma and disease; and
 - (G) research the global impact of disease prevention and cost containment.
- (3) The student models ethical behavior standards and legal responsibilities. The student is expected to:

- (A) apply facility and industry standard policies and procedures, including the Health Insurance Portability and Accountability Act (HIPAA);
 - (B) research and present case studies related to legal and ethical issues in health care;
 - (C) recognize and analyze professional boundaries of patient relationships; and
 - (D) model safe practices, including infection control, proper body mechanics, and patient handling.
- (4) The student explores the knowledge and skills of the nursing process for assessment. The student is expected to:
- (A) perform and assess subjective data during a patient intake in a clinical or simulated setting by:
 - (i) performing a complete health history, including family and social data; and
 - (ii) assessing the chief complaint, history of present illness, past medical history, and a review of systems; and
 - (B) perform and assess objective data during a patient intake in a clinical or simulated setting by demonstrating:
 - (i) the skill of obtaining core vital signs;
 - (ii) the skill of obtaining and assessing height and weight and weight fluctuations; and
 - (iii) the performance of a head-to-toe physical assessment.
- (5) The student explores the knowledge and skills of the nursing process for implementation or intervention. The student is expected to:
- (A) demonstrate the proper use and application of medical equipment related to oxygen therapy, glucometers, pulse oximeters, catheters, incentive spirometers, mobility devices, patient handling devices, and electric hospital beds and chairs;
 - (B) demonstrate patient care, including care related to activities of daily living (ADL), patient positioning, patients' range of motion, basic first aid, patient transfers, and patient transport;
 - (C) demonstrate skills related to or acquire basic life support (BLS) certification as required by industry standards; and
 - (D) demonstrate the skills necessary to track nutrition and elimination such as input and output (I&O) and types of diets.
- (6) The student explores the knowledge and skills of the nursing process of evaluation and re-evaluation. The student is expected to:
- (A) compare normal and abnormal healthcare data;
 - (B) identify how to report trends and abnormal findings to appropriate personnel according to facility protocols; and
 - (C) explain the significance of abnormal findings.
- (7) The student explores the knowledge and skills of the nursing process of documentation. The student is expected to:
- (A) document objective data using medical terminology;
 - (B) document subjective data using medical terminology; and

- (C) record documentation using various models such as Situation, Background, Assessment, and Recommendation (SBAR); Acknowledge, Introduce, Duration, Explanation, and Thank you (AIDET); and Subjective, Objective, Assessment Plan (SOAP).
- (8) The student is expected to provide care for diverse populations such as persons from varying age groups and persons with physical limitations or mental health needs in clinical or simulated environment. The student is expected to:
 - (A) demonstrate appropriate usage of verbal and non-verbal communication techniques for providing care to persons from diverse populations; and
 - (B) apply appropriate techniques for assessments and care.
- (9) The student is expected to provide culturally appropriate care. The student is expected to:
 - (A) use culturally appropriate verbal and non-verbal communication skills; and
 - (B) demonstrate patient interaction strategies for assessments and care.

§127.433. Medical Microbiology (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
 - (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: a course from the Health Science Career Cluster. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
 - (3) The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug-resistant organisms, and emerging diseases.
 - (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are

outside the realm of science because they deal with phenomena that are not currently scientifically testable.

- (5) Students are expected to know that:
- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
- (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) [(e)] Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
- (A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;
 - (B) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team; and
 - (C) locate, evaluate, and interpret career options, opportunities, and postsecondary transitions relating to the field of microbiology.

- (2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as microscopes, slides, streak plates, inoculating loops, Bunsen burners, striker, hot plate, petri dish, agar and other growth mediums, reactive agents, personal protective equipment (PPE), disposable pipettes, lab glassware and instruments, bacterium and other live microbial agents, enzymes, computer software and probes, incubator, and autoclave;
 - (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;
 - (F) organize quantitative and qualitative data using equipment such as graphing calculator, computer software and probes, graphic organizers;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

- (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) or health science field in order to investigate careers.
- (6) The student examines the field of microbiology in relation to medical care. The student is expected to:
- (A) examine the historical development of microbiology as it relates to health care of an individual in modern medicine; and
 - (B) compare the roles, functions, and responsibilities of agencies governing infectious disease control.
- (7) The student is expected to perform and analyze results in the microbiology laboratory. The student is expected to:
- (A) classify microorganisms using a dichotomous key;
 - (B) prepare slides and discuss the differences between Gram positive and Gram negative bacteria such as the bacterial cell wall and the use of oxygen;
 - (C) identify chemical processes such as enzyme catalyst and osmotic potential of microorganisms;
 - (D) identify and discuss technologies used in a laboratory setting such as polymerase chain reaction (PCR), serology, enzyme-linked immunoassay (ELISA), and electrophoresis;
 - (E) prepare plates or active mediums to differentiate the factors required for microbial reproduction and growth;
 - (F) identify the normal flora microorganisms of the human body;
 - (G) identify and differentiate between various pathogens, including opportunistic pathogens, hospital-acquired infections, community-acquired infections, and colonizing microorganisms;
 - (H) isolate colonies and describe the morphology of microorganisms; and
 - (I) interpret and explain the role of the culture and sensitivity report provided to the clinician.
- (8) The student examines the role of microorganisms in infectious diseases. The student is expected to:
- (A) outline and explain the infectious disease process, including how pathogenic microorganisms affect human body systems;
 - (B) categorize diseases caused by bacteria, including *Rickettsia*, fungi, viruses, protozoa, arthropods, and helminths;
 - (C) explain and interpret the body's immune responses and defenses against infection;
 - (D) prepare a bacterial colony and evaluate the effects of anti-microbial agents such as narrow and broad-spectrum antibiotics;
 - (E) examine the environmental and social causes of the emergence and reemergence of diseases such as corona viruses, Ebola, malaria, tuberculosis, and polio;
 - (F) research and discuss drug *aureus*-resistant microorganisms, including carbapenem-resistant *Enterobacteriaceae*, methicillin-resistant *Staphylococcus aureus*, vancomycin-

intermediate/resistant *Staphylococci*, vancomycin-resistant enterococci, and emergent antibiotic-resistant superbugs; and

(G) outline the role of governing agencies in monitoring and establishing guidelines based on the spread of infectious diseases.

(9) The student recognizes the importance of maintaining a safe environment and eliminating hazardous situations. The student is expected to:

(A) identify and apply standard laboratory precautions;

(B) identify and apply microbiological safety practices in accordance with industry standards, including the proper handling, disinfection, and disposal of biological waste and maintenance of containment levels;

(C) identify and apply appropriate personal protection equipment (PPE) and transmission-based precautions, including precautions against droplet, contact, and airborne transmission;

(D) sterilize laboratory and medical equipment and instruments in accordance with industry standards; and

(E) define and select different mechanisms of decontamination such as antiseptics, disinfection, and sterilization.

ATTACHMENT III
Text of Proposed New 19 TAC

Chapter 127. Texas Essential Knowledge and Skills for Career Development and Career and Technical Education

Subchapter J. Hospitality and Tourism

§127.482. Food Science (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
- (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection (a), the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: Principles of Hospitality and Tourism. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.
 - (3) In Food Science, students examine the nature and properties of foods, food microbiology, and the principles of science in food production, processing, preparation, and preservation; use scientific methods to conduct laboratory and field investigations; and make informed decisions using critical thinking and scientific problem solving. This course provides students a foundation for further study that leads to occupations in food and beverage services; the health sciences; agriculture, food, and natural resources; and human services.
 - (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
 - (5) Scientific hypotheses and theories. Students are expected to know that:

- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
- (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by the food service business and industry. The student is expected to:
 - (A) apply interpersonal communication skills in the food service business and industry settings;
 - (B) explain and recognize the value of collaboration within the workplace;
 - (C) examine the importance of time management to succeed in the workforce;
 - (D) identify work ethics and professionalism in a job setting;
 - (E) describe problem-solving and critical-thinking skills used in the workplace; and
 - (F) explore careers and professions in food science.

- (2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, metric rulers, electronic balances, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, and models, diagrams, or samples of biological specimens or structures, vacuum sealer, oven, cook top, cookware, bakeware, cutlery, and measuring cups and spoons;
 - (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;
 - (F) organize quantitative and qualitative data using lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

- (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics or food science field.
- (6) The student analyzes household and commercial sustainability and regulatory practices in food production. The student is expected to:
 - (A) research and investigate resource use, sustainability, and conservation in food production such as with water, land, and oceans;
 - (B) analyze the effect of food on the decomposition cycle, including composting, recycling, and disposal; and
 - (C) demonstrate appropriate methods for sorting and disposing of food waste, including fats and oils, and packaging waste from food production.
- (7) The student analyzes the role of acids and bases in food science. The student is expected to:
 - (A) evaluate physical and chemical properties of acids and bases; and
 - (B) analyze the relationship of pH to the properties, safety, and freshness of food.
- (8) The student evaluates the principles of microbiology and food safety practices. The student is expected to:
 - (A) investigate the properties of microorganisms that cause food spoilage;
 - (B) compare food intoxication and food infection;
 - (C) examine methods to destroy or inactivate harmful pathogens in foods;
 - (D) compare beneficial and harmful microorganisms, including lactic acid bacteria, acetic acid bacteria, various baking and brewing yeasts, *E. coli*, *Staphylococcus*, *Clostridium botulinum*, *Clostridium perfringens*, *Salmonella*, *Listeria*, and *Shigella*;
 - (E) analyze sanitary food-handling practices such as personal hygiene or equipment sanitation; and
 - (F) prepare for a state or national food manager sanitation certification or alternative credential within the field of food science technology.
- (9) The student examines the chemical properties of food. The student is expected to:
 - (A) describe acids, bases, salts, carbohydrates, lipids, proteins and other elements, compounds, and mixtures related to food science;
 - (B) compare heterogeneous and homogeneous mixtures;
 - (C) analyze chemical and physical changes in food; and
 - (D) use chemical symbols, formulas, and equations in food science such as oxidation of sugars in a cut apple or fermentation in the production of yogurt.
- (10) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:
 - (A) identify the solvent and solute in various solutions such as brines;
 - (B) compare unsaturated, saturated, and supersaturated solutions, including their effects on boiling and freezing points in food preparation such as when making candy or ice cream;
 - (C) calculate the concentration of a solution using mass percent such as the concentration of sugar needed for crystallization;

- (D) describe the properties of colloidal dispersions such as gelatin, mayonnaise, or milk;
 - (E) differentiate between and give examples of temporary, semi-permanent, and permanent emulsions;
 - (F) investigate the relationships between the three parts of a permanent emulsion; and
 - (G) create temporary, semi-permanent, and permanent food emulsions.
- (11) The student analyzes the functions of enzymes in food science. The student is expected to:
- (A) describe the role of enzymes as catalysts in chemical reactions of food, including cheese-making, the enzymatic tenderization of meat, and oxidation of sugars in fruit;
 - (B) explain the relationship between an enzyme and a substrate;
 - (C) analyze the functions of enzymes in digestion, including the factors that influence enzyme activity, and relate enzymatic activity in digestion to dietary restrictions; and
 - (D) analyze enzyme reactions in food preparation, including cheese-making, the enzymatic tenderization of meat, and oxidation of sugars in fruit.
- (12) The student evaluates the role of fermentation in food science. The student is expected to:
- (A) analyze modern and historical reasons food is fermented;
 - (B) describe the conditions under which bacterial fermentation of food occurs and use chemical equations to describe the products of fermentation; and
 - (C) prepare various fermented food products.
- (13) The student assesses the reaction of leavening agents in baked products. The student is expected to:
- (A) describe the physical and chemical changes that occur in leavening;
 - (B) identify various leavening agents and describe their functions in food production;
 - (C) use chemical equations to describe how acids act as leavening agents;
 - (D) conduct laboratory experiments with various types and amounts of leavening agents to compare the doughs and batters produced; and
 - (E) create baked products using various leavening agents.
- (14) The student explores the roles of food additives. The student is expected to:
- (A) evaluate the various types of food additives such as incidental, intentional, natural, and artificial;
 - (B) investigate the various functions of food additives such as preserving food, increasing nutritive value, and enhancing sensory characteristics; and
 - (C) research local, state, national, and international agencies involved in regulating food additives.
- (15) The student analyzes the effects of heat energy transfer in food production. The student is expected to:
- (A) analyze the relationship between molecular motion and temperature;
 - (B) compare heat transfer processes, including conduction, convection, and radiation;
 - (C) investigate the role of phase changes in food production, including crystallization, coagulation, and reduction; and
 - (D) demonstrate rates of reaction using various temperatures and describe the effects of temperature on the characteristics of food products.

- (16) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:
- (A) identify the physical properties and chemical structures of simple and complex carbohydrates;
 - (B) describe the functions of carbohydrates such as caramelization, crystallization, and thickening agents in food production;
 - (C) describe the processes of gelatinization and retrogradation in food production; and
 - (D) create food products using simple and complex carbohydrates.
- (17) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:
- (A) identify the physical properties and chemical structures of saturated and unsaturated fats;
 - (B) describe the functions of different types of fats in food production;
 - (C) demonstrate methods for controlling fat oxidation;
 - (D) analyze the effects of temperature on fats in food preparation;
 - (E) conduct laboratory experiments using the scientific processes to explore the functions of fats in food production; and
 - (F) create food products using saturated and unsaturated fats.
- (18) The student evaluates the properties of proteins and their effects on food production. The student is expected to:
- (A) identify the physical properties and chemical structures of proteins;
 - (B) explain the processes of protein denaturation, coagulation, and syneresis;
 - (C) describe the functions and uses of proteins such as in emulsions, foams, and gluten formation;
 - (D) analyze the effects of moisture and temperature on protein in food production such as moist and dry heat methods for preparation; and
 - (E) create food products using protein.
- (19) The student evaluates the properties of vitamins and minerals and their interrelationships in food production. The student is expected to compare the effects of food production on water- and fat-soluble vitamins and minerals.
- (20) The student evaluates the properties of water and their effects on food production. The student is expected to:
- (A) identify the properties of water, including as a solvent or medium, and its effects on food production; and
 - (B) compare the effects of hard and soft water on food production.
- (21) The student explains nutritional aspects of food production. The student is expected to:
- (A) describe how variations in human digestion and metabolism affect dietary modifications;
 - (B) identify common and special dietary modifications such as for food allergies, intolerances, or medical conditions;
 - (C) develop and modify recipes for dietary differences such as allergies and intolerances or for personal health preferences such as low-fat or sugar-free; and
 - (D) plan and create a dining experience using the most recent USDA dietary guidelines.

- (22) The student analyzes processes that manage bacteria to safe levels during food production. The student is expected to investigate processes that manage food bacteria such as dehydration, pasteurization, and food irradiation.
- (23) The student examines packaging and labeling guidelines. The student is expected to:
- (A) research and evaluate federal food packaging regulations, including the information required on a food label;
 - (B) compare global food packaging regulations to those of the United States; and
 - (C) analyze the effectiveness of commercial food packaging for specific foods.
- (24) The student analyzes food preservation processes. The student is expected to:
- (A) describe the benefits of food preservation;
 - (B) compare various methods of household and commercial dehydration, canning, and freezing; and
 - (C) create a food product using a selected preservation method.

ATTACHMENT IV
Text of Proposed New 19 TAC

Chapter 127. Texas Essential Knowledge and Skills for Career Development and Career and Technical Education

Subchapter M. Law and Public Service

~~§127.651. Implementation of Texas Essential Knowledge and Skills for Law and Public Service, Adopted 2021.~~

- ~~(a) The provisions of this subchapter shall be implemented by school districts beginning with the 2022-2023 school year.~~
- ~~(b) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for career and technical education as adopted in §127.652 of this subchapter.~~
- ~~(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §127.652 of this subchapter shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.~~
- ~~(d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §127.652 of this subchapter shall be implemented for the following school year.~~

§127.652. Forensic Science (One Credit), Adopted 2021.

- ~~(a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2023-2024 school year.~~
 - ~~(1) No later than August 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.~~
 - ~~(2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2023-2024 school year and apply to the 2023-2024 and subsequent school years.~~
 - ~~(3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection (a), the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.~~
- ~~(b) ~~(a)~~ General requirements. The course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.~~
- ~~(c) ~~(b)~~ Introduction.~~
 - ~~(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.~~

- (2) The Law and Public Service Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services.
- (3) Forensic Science is a survey course that introduces students to the application of science to law. Students learn terminology and procedures related to the collection and examination of physical evidence using scientific processes performed in a field or laboratory setting. Students also learn the history and the legal aspects of forensic science.
- (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (5) Students are expected to know that:
 - (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) [(e)] Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to demonstrate professional standards/employability skills such as demonstrating good attendance, punctuality, and ethical conduct; meeting deadlines, and working toward personal and team goals.
- (2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools and equipment such as scientific calculators, computers, internet access, digital cameras, video recording devices, meter sticks, metric rulers, measuring tapes, digital range finders, protractors, calipers, light microscopes up to 100x magnification, hand lenses, stereoscopes, digital scales, dissection equipment, standard laboratory glassware, appropriate personal protective equipment (PPE), an adequate supply of consumable chemicals, biological specimens, prepared evidence slides and samples, evidence packaging and tamper evident tape, evidence tents, crime scene tape, L-rulers, American Board of Forensic Odontology (ABFO) scales, alternate light sources (ALS) and ALS protective goggles, blood specimens, blood presumptive tests, glass samples of various chemical composition, human and non-human bones, fingerprint brushes and powders, lifting tapes and cards, ten-print cards and ink pads, swabs with containers, disposable gloves, and relevant and necessary kits;
 - (E) collect quantitative data with accuracy and precision using the International System of Units (SI) and United States customary units and qualitative data as evidence;
 - (F) organize quantitative and qualitative data using appropriate methods of communication such as reports, graphs, tables, or charts;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
 - (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
 - (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

- (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;
 - (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field.
- (6) The student explores the history of forensic science. The student is expected to:
- (A) analyze the historical development and current advancements of different forensic science disciplines such as forensic biology, anthropology/odontology, forensic chemistry, trace evidence, ballistics, fingerprints, digital forensics, and questioned documents; and
 - (B) explain significant historical and modern contributions to the development and advancement of forensic science made by contributors such as Edmond Locard, Mathieu Orfila, Francis Galton, Edwin Henry, and Alec Jeffreys.
- (7) The student analyzes legal aspects within forensic science. The student is expected to:
- (A) summarize the ethical standards required of a forensic science professional;
 - (B) identify and explain knowledge of terminology and procedures employed in the criminal justice system as they pertain to the chain of custody procedure for evidence;
 - (C) identify and explain knowledge of terminology and procedures employed in the criminal justice system as they pertain to expert witness testimony;
 - (D) research and discuss the effect of biases such as confirmation bias and framing cognitive bias on evidence collection, forensic analysis, and expert testimony; and
 - (E) compare the admissibility of expert witness testimony in terms of the Frye Standard and the Daubert Standard under federal rules of evidence.
- (8) The student explores career options within forensic science. The student is expected to:
- (A) explore and describe discipline-specific requirements for careers in forensic science, including collegiate course requirements, licensure, certifications, and physical and mental capabilities;
 - (B) differentiate the roles and responsibilities of professionals in the criminal justice system, including forensic scientists, crime scene investigators, criminologists, court systems personnel, and medicolegal death investigations; and
 - (C) differentiate the functions of various forensic science disciplines such as forensic biology, forensic chemistry, trace evidence, ballistics, fingerprints, digital forensics, and questioned documents.
- (9) The student recognizes the procedures of crime scene investigation while maintaining scene integrity. The student is expected to:

- (A) explain the roles and tasks needed to complete a crime scene examination, which may require collaboration with outside experts and agencies, and demonstrate the ability to work as a member of a crime scene team;
 - (B) develop a detailed, technical written record based on observations and activities, documenting the crime scene examination;
 - (C) discuss the elements of criminal law that guide search and seizure of persons, property, and evidence;
 - (D) conduct a primary and secondary systematic search of a simulated crime scene for physical evidence utilizing search patterns such as spiral, line, grid, and zone;
 - (E) document a crime scene using photographic or audiovisual equipment;
 - (F) generate a physical or digital crime scene sketch, including coordinates or measurements from fixed points, compass directions, scale of proportion, legend-key, heading, and title block; and
 - (G) demonstrate proper techniques for collecting, packaging, and preserving physical evidence found at a crime scene while maintaining documentation, including chain of custody.
- (10) The student analyzes fingerprint evidence in forensic science. The student is expected to:
- (A) compare the three major fingerprint patterns of arches, loops, and whorls;
 - (B) identify the minutiae of fingerprints, including bifurcations, ending ridges, dots, short ridges, and enclosures/islands;
 - (C) distinguish between patent, plastic, and latent impressions;
 - (D) perform procedures for developing and lifting latent prints on nonporous surfaces using cyanoacrylate and fingerprint powders;
 - (E) perform procedures for developing latent prints using chemical processes on porous and adhesive surfaces with chemicals such as ninhydrin and crystal violet and documenting the results via photography; and
 - (F) explain the Integrated Automated Fingerprint Identification System (IAFIS) and describe the implications of Next Generation Identification (NGI) systems.
- (11) The student collects and analyzes impression evidence in forensic science. The student is expected to:
- (A) analyze the class and individual characteristics of tool mark impressions and the recovery and documentation of surface characteristics such as wood or metal;
 - (B) analyze the class and individual characteristics of footwear impressions and the recovery and documentation of surface characteristics such as soil or organic plant material;
 - (C) analyze the class and individual characteristics of tire tread impressions and the recovery and documentation of surface characteristics such as soil or organic plant material; and
 - (D) compare impression evidence collected at a simulated crime scene with the known impression.
- (12) The student recognizes the methods to process and analyze hair and fibers found in a crime scene. The student is expected to:
- (A) demonstrate how to collect hair and fiber evidence at a simulated crime scene;
 - (B) perform the analysis of hair and fiber evidence using methods such as microscopy and flame testing;

- (C) compare the microscopic characteristics of human hair and non-human hair, including medulla, pigment distribution, and scales;
 - (D) describe and illustrate the different microscopic characteristics used to determine the origin of a human hair sample; and
 - (E) differentiate between natural and synthetic fibers.
- (13) The student recognizes the methods to process and analyze glass evidence. The student is expected to:
- (A) demonstrate how to collect and preserve glass evidence;
 - (B) compare the composition of various types of glass such as soda lime, borosilicate, leaded, and tempered;
 - (C) determine the direction of a projectile by examining glass fractures; and
 - (D) define refractive index and explain how it is used in forensic glass analysis.
- (14) The student explores principles of questioned document analysis in the physical and digital form. The student is expected to:
- (A) research and explain different types of examinations performed on digital and physical evidence in a forensic laboratory such as digital data recovery, counterfeiting, ink, and paper analysis;
 - (B) investigate and describe the security features incorporated in U.S. and foreign currency to prevent counterfeiting; and
 - (C) perform handwriting comparisons of an unknown sample with exemplars by analyzing characteristics such as letter, line, and formatting.
- (15) The student evaluates firearms and ballistics evidence. The student is expected to:
- (A) describe the mechanism of modern firearms such as long guns and handguns;
 - (B) identify the components and characteristics of bullet and cartridge cases;
 - (C) describe the composition of and method of analysis for gunshot residue and primer residue;
 - (D) conduct and calculate trajectory analysis of bullet strikes within a simulated crime scene; and
 - (E) identify and recognize the type of information available through the National Integrated Ballistics Information Network.
- (16) The student identifies controlled and illicit substances. The student is expected to:
- (A) differentiate between toxicological analysis and controlled substance analysis as they relate to the method of collection and impact on the body;
 - (B) classify controlled substances using the schedules under the Controlled Substances Act; and
 - (C) identify unknown substances using presumptive and confirmatory procedures such as microchemical/color indicating reagent field tests, microscopy, chromatography, and spectrophotometry.
- (17) The student explores toxicology in forensic science. The student is expected to:
- (A) explain the absorption, distribution, metabolization, and elimination of toxins such as alcohol, prescription drugs, controlled substances, and carbon monoxide through the human body;

- (B) describe presumptive and confirmatory laboratory procedures as they relate to toxicological analysis such as head space analysis, solid-phase extractions, gas chromatography-mass spectrometry (GC/MS), color tests, and immunoassays;
 - (C) interpret results from presumptive and confirmatory laboratory procedures, including GC/MS and their implications; and
 - (D) explain the precautions necessary in the forensic laboratory for proper preservation of biological samples.
- (18) The student analyzes blood spatter at a simulated crime scene. The student is expected to:
 - (A) analyze blood stain patterns based on surface type and appearance such as size, shape, distribution and location in order to determine the mechanism by which the patterns are created;
 - (B) explain the methods of chemically enhancing latent blood patterns using reagents such as Blue Star or Amido Black; and
 - (C) conduct and interpret blood presumptive tests for various biologicals such as phenolphthalein and tetramethylbenzidine (TMB).
- (19) The student analyzes the foundations and methodologies surrounding the processing of biological evidence for the purpose of identification. The student is expected to:
 - (A) identify different types of biological samples and practice proper collection and preservation techniques;
 - (B) identify the red blood cell antigens and antibodies as they relate to human blood types;
 - (C) describe the structure of a deoxyribonucleic acid (DNA) molecule and its function;
 - (D) explain the analytical procedure for generating a DNA profile, including extraction, quantification, amplification, and capillary electrophoresis;
 - (E) explain the different methodologies surrounding the different types of DNA analysis such as short tandem repeats (STRs), Y-STRs, mitochondrial DNA, and single nucleotide polymorphisms (SNPs);
 - (F) interpret the components of an electropherogram; and
 - (G) explore the databasing systems associated with DNA such as Combined DNA Index System (CODIS) and ancestry-based databasing systems.
- (20) The student explores the principles surrounding medicolegal death investigations. The student is expected to:
 - (A) explain the principles of rigor, algor, and livor mortis and how they apply to deceased persons;
 - (B) differentiate between the types of wound patterns such as lacerations and blunt force trauma resulting from stabbings, bludgeoning, gunshots, and strangulations;
 - (C) determine cause and manner of death from an autopsy report obtained through resources such as case studies, simulated autopsies, and dissections; and
 - (D) determine the approximate time of death using entomology.
- (21) The student explores principles of anthropology and odontology relevant to forensic science. The student is expected to:
 - (A) identify the major bones of the human skeletal system;
 - (B) compare composition and structure of human and non-human bones;
 - (C) describe the collection and preservation methods for bone evidence;

- (D) explain the characteristics of the human skeletal system indicative of specific biological sex and approximate range of age and height; and
- (E) explain how human remains are identified through dental records such as dentures, x-rays, and implants.

ATTACHMENT V
Text of Proposed New 19 TAC

**Chapter 127. Texas Essential Knowledge and Skills for Career Development and Career
and Technical Education**

Subchapter O. Science, Technology, Engineering, and Mathematics

§127.778. Principles of Bioscience (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2023-2024 school year.
- (1) No later than August 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2023-2024 school year and apply to the 2023-2024 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.
 - (3) Principles of Bioscience provides an overview of biotechnology, bioengineering, and related fields. Topics related to genetics, proteins, and nucleic acids reinforce the applications of Biology content. Students will further study the increasingly important agricultural, environmental, economic, and political roles of bioenergy and biological remediation; the roles of nanoscience and nanotechnology in biotechnology medical research; and future trends in biological science and biotechnology.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;

- (B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;
 - (C) present written and oral communication in a clear, concise, and effective manner;
 - (D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and
 - (E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.
- (2) The student explores biotechnology career opportunities. The student is expected to:
- (A) determine interests in the field of biotechnology through explorations such as career assessments, interactions with biotechnology professionals, media, and literature;
 - (B) identify career options in the field of biotechnology;
 - (C) identify reliable sources of career information;
 - (D) research and communicate interests, knowledge, educational level, abilities, and skills needed in a biotechnology-related occupation;
 - (E) identify conventional and non-conventional career opportunities that match interests and aptitudes;
 - (F) research applications of biotechnology in medicine, the environment, and settings such as pharmaceutical, agricultural, and industrial;
 - (G) use technology to research biotechnology topics, including identifying and selecting appropriate scholarly references; and
 - (H) analyze and discuss professional publications such as academic and peer-reviewed journals and technical reports.
- (3) The student evaluates ethical and legal issues in biotechnology. The student is expected to:
- (A) identify current ethical and legal issues;
 - (B) describe the history of biotechnology and related ethical and legal issues;
 - (C) discuss legal and technology issues for at least two biotechnology-related areas; and
 - (D) analyze examples of biotechnology views supported by objective and subjective sources such as scientific data, economic data, and sociocultural contexts.
- (4) The student examines federal, state, local, and industry regulations as applied to biotechnological processes through researching credible sources. The student is expected to:
- (A) identify local, state, and federal agencies responsible for regulating the biotechnology industry such as the U.S. Department of Agriculture (USDA), the Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), and the Centers for Disease Control and Prevention (CDC);
 - (B) identify professional organizations participating in the development of biotechnology policies;
 - (C) identify and define terms related to biotechnology regulations such as Good Laboratory Practices (GLP), Good Manufacturing Practices (GMP), and Globally Harmonized System (GHS); and
 - (D) outline the methods and procedures used in biotechnology laboratories to follow local, state, and federal regulations such as those in the agricultural and health areas.
- (5) The student demonstrates knowledge of the business climate for biotechnology industry sectors in the current market. The student is expected to:

- (A) identify professional publications;
 - (B) identify the various biotechnology industry sectors;
 - (C) investigate and report on career opportunities in the biotechnology industry sectors; and
 - (D) identify professional organizations such as those at the local, state, and national levels.
- (6) The student researches and exhibits employability skills that support a career in the biotechnology industry. The student is expected to:
- (A) demonstrate verbal, non-verbal, written, and electronic communication skills;
 - (B) demonstrate skills used to secure and maintain employment;
 - (C) demonstrate appropriate workplace etiquette;
 - (D) display productive work habits and attitudes; and
 - (E) identify appropriate safety equipment and practices as outlined in Texas Education Agency-approved and industry-approved safety standards such as the use of personal protective equipment (PPE) and safety data sheets (SDS).
- (7) The student investigates how biotechnology impacts the origins of waste and resource recovery. The student is expected to:
- (A) identify biotechnology manufacturing processes and their end products, including waste and marketable products;
 - (B) explore the impacts of waste on biotic and abiotic factors in the environment such as effects on biological life cycles and pollution from nonbiodegradable single-use materials and microplastics;
 - (C) analyze the results of manufacturing refuse;
 - (D) explain the negative impacts of waste with respect to the individual, society, and the global population;
 - (E) investigate solutions to waste through bioremediation; and
 - (F) investigate evidence supporting waste management through regulations, public policy, and technology development.
- (8) The student examines the relationship of biotechnology to the development of commercial products. The student is expected to:
- (A) identify applications of agricultural biotechnology such as selective breeding of livestock and plants, aquaculture, horticultural products, and genetically modified organisms;
 - (B) identify applications of industrial biotechnology such as fermented food and beverages, genetically engineered proteins for industry, biocatalysts, bio polymers, biosensors, bioremediation, and biofuels;
 - (C) identify applications of medical and pharmaceutical biotechnology such as genetically modified cells, antibodies, vaccine and gene therapy, genetic testing for human disease/disorders, three-dimensional bio-printing, and medicines from plants, animals, fungi, and bacteria;
 - (D) identify applications of research and development in biotechnology such as deoxyribonucleic acid (DNA) and protein synthesis and sequencing, genetic testing and screening, DNA identification, RNAi, siRNA, miRNA, the CRISPR/Cas9 system, and synthetic biology;
 - (E) identify the applications of biotechnology in the fields of forensics, law enforcement, nanotechnology, and bioinformatics;

- (F) research ethical considerations, laws, and regulations for biotechnological applications such as bioinformatics, genetic engineering, and nanotechnology; and
- (G) identify the function of laboratory equipment, including a microscope, thermocycler, pH meter, hot plate stirrer, electronic balance, autoclave, centrifuge, transilluminator, micropipette, incubator, electrophoresis unit, vortex mixer, water bath, laboratory glassware, biosafety cabinet, and chemical fume hood.

§127.779. Biotechnology I (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2023-2024 school year.
 - (1) No later than August 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2023-2024 school year and apply to the 2023-2024 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: one credit in biology. Recommended prerequisites: Principles of Bioscience and one credit in chemistry. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.
 - (3) In Biotechnology I, students will apply advanced academic knowledge and skills to the emerging fields of biotechnology such as agricultural, medical, regulatory, and forensics. Students will have the opportunity to use sophisticated laboratory equipment, perform statistical analysis, and practice quality-control techniques. Students will conduct laboratory and field investigations and make informed decisions using critical thinking, scientific problem solving, and the engineering design process. Students in Biotechnology I will study a variety of topics that include structures and functions of cells, nucleic acids, proteins, and genetics.
 - (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
 - (5) Students are expected to know that:

- (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
- (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;
 - (B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;
 - (C) present written and oral communication in a clear, concise, and effective manner;
 - (D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and
 - (E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.

- (2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as microscopes, thermocyclers, pH meters, hot plate stirrers, glass bulb thermometers, timing devices, electronic balances, vortex mixers, autoclaves, micropipettes, centrifuges, gel and capillary electrophoresis units, cameras, data collection probes, spectrophotometers, transilluminators, incubators, water baths, laboratory glassware, biosafety cabinets, and chemical fume hoods;
 - (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;
 - (F) organize quantitative and qualitative data using laboratory notebooks, written lab reports, graphs, charts, tables, digital tools, diagrams, scientific drawings, and student-prepared models;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;
 - (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

- (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.
- (6) The student explores the emerging field of biotechnology. The student is expected to:
- (A) define biotechnology and provide examples of biotechnology products such as recombinant proteins, fermented foods, biopharmaceuticals, and genetically modified foods;
 - (B) compare applications of bioinformatics such as deoxyribonucleic acid (DNA) barcoding, sequencing, National Center for Biotechnology Information (NCBI) tools, ClinVar, Genemonon Mastermind, genetic testing, phylogenetic relationships, and the use of online databases;
 - (C) research and identify career opportunities in genetics, bioinformatics, and in fields such as molecular, forensic, medical, regulatory, and agricultural biotechnology;
 - (D) identify significant contributions of diverse scientists to biotechnology and explain their impact on society;
 - (E) define bioethics and evaluate the applications of bioethics;
 - (F) evaluate different points of view about issues and current events in biotechnology;
 - (G) identify applications in agricultural biotechnology such as genetically modified organisms (GMOs), plant propagation from tissue culturing, and aquaculture hydroponics;
 - (H) identify applications in medical biotechnology such as vaccines production, stem cells therapy, gene therapy, pharmaceutical production, pharmacogenetics, genomics, synthetic biology, and personalized medicine;
 - (I) identify applications in forensic biotechnology such as capillary electrophoresis, real-time polymerase chain reaction, DNA fingerprinting, restriction fragment length polymorphisms (RFLP) analysis, toxicology, and serology; and
 - (J) identify solutions to waste through bioremediation and non-biotechnological standard solutions such as landfills, incineration, absorbent materials, and catalytic materials.
- (7) The student summarizes biotechnology laboratory procedures and their applications in the biotechnology industry. The student is expected to:
- (A) identify the major sectors of the biotechnology industry such as medical and pharmaceutical, agricultural, industrial, forensic, and research and development;
 - (B) identify the biotechnology laboratory procedures used in each sector such as selective breeding, genetic engineering, DNA analysis, and protein analysis; and
 - (C) compare and contrast the different applications used in biotechnology laboratory procedures of each sector.
- (8) The student understands the role of genetics in the biotechnology industry. The student is expected to:
- (A) explain terms related to molecular biology, including nucleic acids, nitrogen bases, nucleotides, mRNA, rRNA, tRNA, ribosomes, amino acids, transcription, translation, polymerase, and protein synthesis;
 - (B) compare and contrast the structures and functions of DNA and ribonucleic acid (RNA), including nitrogen bases, nucleotides, the helical nature of DNA, and hydrogen bonding between purines and pyrimidines;

- (C) distinguish between nuclear and mitochondrial DNA and their gamete sources;
 - (D) describe the DNA replication process in eukaryotic and prokaryotic cells, including leading and lagging strands and Okazaki fragments;
 - (E) illustrate the process of protein synthesis, including ribosomal subunits and the role of tRNA;
 - (F) describe the structures and functions of proteins, including three-dimensional folding, enzymes, and antibodies;
 - (G) explain the molecular structures of genes, including enhancers, promoters, exons, introns, and coding regions;
 - (H) describe the different types of mutations, including inversions, deletions, duplications, and substitutions;
 - (I) explain the effects of mutation types on phenotype and gene function; and
 - (J) describe unique elements of the molecular structure of a chromosome such as short tandem repeats (STR), transposons, and methylation and acetylation of DNA.
- (9) The student analyzes the importance of recombinant DNA technology and genetic engineering. The student is expected to:
- (A) describe the fundamental steps in recombinant DNA technology;
 - (B) explain how recombinant DNA technology such as nuclear transfer cloning is used to clone genes and create recombinant proteins;
 - (C) explain the role of tissue cultures in genetic modification procedures;
 - (D) describe plant- and animal-tissue culture procedures;
 - (E) compare and contrast growing conditions for plant and animal tissue cultures;
 - (F) explain the role of restriction enzymes; and
 - (G) distinguish between vectors commonly used in biotechnology for DNA insertion, including plasmids, adenoviruses, retroviruses, and bacteriophages.
- (10) The student examines federal, state, local, and industry regulations as related to biotechnology. The student is expected to:
- (A) discuss the relationship between the local, state, and federal agencies responsible for regulation of the biotechnology industry such as the U.S. Department of Agriculture (USDA), the Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), and the Centers for Disease Control and Prevention (CDC); and
 - (B) analyze policies and procedures used in the biotechnology industry such as quality assurance, standard operating procedures (SOPs), Good Manufacturing Practices (GMPs), and International Organization for Standardization (ISO) quality systems.
- (11) The student performs biotechnology laboratory procedures. The student is expected to:
- (A) measure volumes and weights to industry standards with accuracy and precision;
 - (B) analyze data and perform calculations and statistical analysis as it relates to biotechnology laboratory experiments;
 - (C) demonstrate proficiency in pipetting techniques;
 - (D) identify microorganisms using staining methods such as the Gram stain, methylene-blue stain, and acid-fast staining;

- (E) prepare a restriction digest, isolate nucleic acids, and evaluate results using techniques such as gel and capillary electrophoresis, Northern blot analysis, and Southern blot analysis;
 - (F) explain the importance of media components to the outcome of cultures;
 - (G) isolate, maintain, and store microbial cultures safely;
 - (H) prepare seed inoculum; and
 - (I) perform plating techniques such as streak plating, spread plating, and the Kirby-Bauer method.
- (12) The student prepares solutions and reagents for the biotechnology laboratory. The student is expected to:
- (A) demonstrate aseptic techniques for establishing and maintaining a sterile work area;
 - (B) prepare, dispense, and monitor physical properties of stock reagents, buffers, media, and solutions;
 - (C) calculate and prepare a dilution series; and
 - (D) determine optimum conditions of reagents for experimentation.
- (13) The student conducts quality-control analysis while performing biotechnology laboratory procedures. The student is expected to:
- (A) perform validation testing on laboratory reagents and equipment; and
 - (B) analyze data and perform calculations and statistical analysis on results of quality-control samples.

§127.780. Biotechnology II (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2023-2024 school year.
- (1) No later than August 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2023-2024 school year and apply to the 2023-2024 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Biotechnology I and one credit in chemistry. shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

- (2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.
- (3) Biotechnology II has the components of any rigorous scientific or bioengineering program of study. This course applies the standard skills mastered in Biotechnology I and includes additional skills related to assay design, protein analysis, applications of genetic engineering, and quality management. After taking this course, students should be prepared for entry-level lab technician jobs.
- (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (5) Students are expected to know that:
 - (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.
- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

- (A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;
- (B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;
- (C) present written and oral communication in a clear, concise, and effective manner;
- (D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and
- (E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

- (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
- (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
- (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
- (D) use appropriate tools such as microscopes, thermocyclers, pH meters, hot plate stirrers, glass bulb thermometers, timing devices, electronic balances, vortex mixers, autoclaves, micropipettes, centrifuges, gel and capillary electrophoresis units, cameras, data collection probes, spectrophotometers, transilluminators, incubators, water baths, laboratory glassware, biosafety cabinets, and chemical fume hoods;
- (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;
- (F) organize quantitative and qualitative data using laboratory notebooks, written lab reports, graphs, charts, tables, digital tools, diagrams, scientific drawings, and student-prepared models;
- (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
- (H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

- (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
- (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;
- (C) use mathematical calculations to assess quantitative relationships in data; and
- (D) evaluate experimental and engineering designs.

- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;
 - (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.
- (6) The student prepares for an entry-level career in biotechnology. The student is expected to:
- (A) research and identify career opportunities in genetics, bioinformatics, and fields such as molecular, forensic, medical, regulatory, and agricultural biotechnology;
 - (B) identify the significance of recent advances in molecular, forensic, medical, regulatory, and agricultural biotechnology;
 - (C) discuss current bioethical issues related to the field of biotechnology;
 - (D) create a job-specific resume; and
 - (E) develop a career plan.
- (7) The student analyzes academic and professional journals and technical reports. The student is expected to:
- (A) identify the scientific methodology used by a researcher;
 - (B) examine a prescribed research design and identify dependent and independent variables;
 - (C) evaluate a prescribed protocol to determine the purpose for each of the procedures performed; and
 - (D) interpret data and evaluate conclusions.
- (8) The student explores assay design in the field of biotechnology. The student is expected to:
- (A) define assay requirements and optimizations;
 - (B) perform statistical analysis on assay design and experimental data such as linearity, system sustainability, limit of detection, and R² values;
 - (C) determine an unknown protein concentration using a standard curve and technique such as a Bradford assay; and
 - (D) evaluate enzyme kinetics using a colorimetric assay.
- (9) The student explores applications related to protein expression in the field of biotechnology. The student is expected to:
- (A) describe the fundamental steps in recombinant deoxyribonucleic acid (DNA) technology;

- (B) produce a recombinant protein such as green fluorescent protein (GFP);
 - (C) analyze proteins using techniques such as enzyme-linked immunosorbent assay (ELISA), spectrophotometry, and sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE); and
 - (D) isolate a specific protein from a biological sample using techniques such as chromatography and Western blot analysis.
- (10) The student explores applications of recombinant DNA technology and genetic engineering. The student is expected to:
- (A) prepare and maintain tissue cultures commonly used in genetic modification procedures;
 - (B) evaluate the effects of changes to growing conditions such as pH, temperature, and growth media;
 - (C) evaluate the results of a bacterial transformation using a restriction enzyme digest and Southern blot analysis;
 - (D) compare and contrast vectors commonly used in biotechnology applications, including plasmids, adenoviruses, retroviruses, and bacteriophages;
 - (E) explain the steps and components of the polymerase chain reaction (PCR); and
 - (F) explain applications of CRISPR/Cas9 technology in gene editing and diagnostics.
- (11) The student prepares solutions and reagents for the biotechnology laboratory. The student is expected to:
- (A) demonstrate aseptic techniques for establishing and maintaining a sterile work area;
 - (B) prepare, dispense, and monitor physical properties of stock reagents, buffers, media, and solutions;
 - (C) calculate and prepare a dilution series;
 - (D) determine acceptability and optimum conditions of reagents for experimentation; and
 - (E) prepare multi-component solutions of given molarity or concentration and volume.
- (12) The student investigates the role of quality in the biotechnology industry. The student is expected to:
- (A) describe the product pipeline in the biotechnology industry;
 - (B) describe the importance of quality assurance and quality control;
 - (C) explain the importance of documentation to quality assurance and quality control;
 - (D) describe the importance of corrective and preventive action (CAPA);
 - (E) describe Quality Management Systems (QMS) components, including inspection, audit, surveillance, and prevention;
 - (F) describe Good Manufacturing Practices (GMP), Good Clinical Practices (GCP), Good Documentation Practices (GDP), Good Lab Practices (GLP), and International Organization for Standardization (ISO);
 - (G) perform validation testing on laboratory reagents and equipment;
 - (H) analyze data and perform calculations and statistical analysis on results of quality-control samples such as standard deviation and percent error; and
 - (I) apply and create industry protocols such as laboratory method protocols, standard operating procedures (SOPs), and validation forms.

§127.781. Principles of Applied Engineering (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
- (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.
 - (3) Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and be able to make informed career decisions.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (d) ~~(c)~~ Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession;
 - (B) cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;
 - (C) present written and oral communication in a clear, concise, and effective manner;
 - (D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and
 - (E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks.

- (2) The student investigates the components of engineering and technology systems. The student is expected to:
- (A) investigate and report on the history of engineering disciplines, including chemical, civil, electrical, and mechanical engineering;
 - (B) identify the inputs, processes, and outputs associated with technological systems;
 - (C) describe the difference between open and closed systems;
 - (D) describe how technological systems interact to achieve common goals;
 - (E) compare engineering, science, and technology career paths, including entry-level employment, military service, apprenticeships, community and technical colleges, and universities;
 - (F) conduct and present research on emerging and innovative technology; and
 - (G) demonstrate proficiency of the engineering design process.
- (3) The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:
- (A) use clear and concise written, verbal, and visual communication techniques;
 - (B) maintain a design and computation engineering notebook;
 - (C) develop and present ideas using sketching and computer-aided design and drafting (CADD);
 - (D) draw conclusions using industry-standard visualization techniques and media;
 - (E) maintain a paper or digital portfolio using the engineering documentation process; and
 - (F) use collaborative tools such as desktop or web-based applications to share and develop information.
- (4) The student uses appropriate tools and demonstrates safe work habits. The student is expected to:
- (A) master relevant safety tests;
 - (B) follow lab safety guidelines as prescribed by instructor in compliance with local, state, and federal regulations;
 - (C) identify industry safety terminology related to the personal work environment such as Occupational Safety and Health Administration (OSHA), American Society of Mechanical Engineers (ASME), and personal protective equipment (PPE);
 - (D) recognize the classification of hazardous materials and wastes;
 - (E) describe appropriate ways to dispose of hazardous materials and wastes;
 - (F) maintain, safely handle, and properly store laboratory equipment;
 - (G) describe the implications of negligent or improper maintenance; and
 - (H) demonstrate the use of precision measuring instruments.
- (5) The student describes the factors that affect the progression of technology and analyzes the potential intended and unintended consequences of technological advances. The student is expected to:
- (A) describe how technology has affected individuals, societies, cultures, economies, and environments;
 - (B) describe how the development and use of technology influenced past events;
 - (C) describe how and why technology progresses; and

- (D) predict possible changes caused by the advances of technology.
- (6) The student thinks critically and applies fundamental principles of system modeling and design to multiple design projects. The student is expected to:
- (A) identify and describe an engineering design process needed for a project, including the design process and prototype development and initiating, planning, executing, monitoring and controlling, and closing a project;
- (B) identify the chemical, mechanical, and physical properties of engineering materials and identify testing methods associated with the materials;
- (C) use problem-solving techniques to develop technological solutions such as product, process, or system;
- (D) use consistent units for all measurements and computations; and
- (E) assess the risks and benefits of a design solution.
- (7) The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:
- (A) describe applications of robotics, process control, and automation systems;
- (B) apply design concepts to problems in robotics, process control, and automation systems;
- (C) identify fields and career opportunities related to robotics, process control, and automation systems; and
- (D) identify emerging trends in robotics, process control, and automation systems.
- (8) The student understands the opportunities and careers in fields related to electrical and mechanical systems. The student is expected to:
- (A) describe the applications of electrical and mechanical systems;
- (B) describe career opportunities in electrical and mechanical systems;
- (C) identify emerging trends in electrical and mechanical systems; and
- (D) describe and apply basic electronic theory.
- (9) The student collaborates as a team member while completing a comprehensive project. The student is expected to:
- (A) apply the design process, including decision matrices, as a team participant;
- (B) perform different roles within the project as a team member;
- (C) formulate decisions using collaborative strategies such as decision and design matrices and conflict resolution;
- (D) maintain an engineering notebook for the project;
- (E) develop and test the model for the project; and
- (F) demonstrate communication skills by preparing and presenting the project, including building consensus setback resolution and decision matrices.
- (10) The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:
- (A) set up, create, and modify drawings;
- (B) store and retrieve geometry;
- (C) demonstrate and use appropriate line types in engineering drawings;
- (D) draw two-dimensional, single-view objects;

- (E) create multi-view working drawings using orthographic projection;
 - (F) dimension objects using current American National Standards Institute (ANSI) standards;
 - (G) draw single-line two-dimensional pictorial representations; and
 - (H) create working drawings that include section views.
- (11) The student creates justifiable solutions to open-ended real-world problems using engineering design practices and processes. The student is expected to:
- (A) identify and define an engineering problem;
 - (B) formulate goals, objectives, and requirements to solve an engineering problem;
 - (C) determine the design parameters such as materials, personnel, resources, funding, manufacturability, feasibility, and time associated with an engineering problem;
 - (D) establish and evaluate potential constraints, including health, safety, social, environmental, ethical, political, regulatory, and legal, pertaining to a problem;
 - (E) identify or create alternative solutions to a problem using a variety of techniques such as brainstorming, reverse engineering, and researching engineered and natural solutions;
 - (F) test and evaluate proposed solutions using methods such as creating models, prototypes, mock-ups, or simulations or performing critical design review, statistical analysis, or experiments;
 - (G) apply structured techniques such as a decision tree, design matrix, or cost-benefit analysis to select and justify a preferred solution to a problem;
 - (H) predict performance, failure modes, and reliability of a design solution; and
 - (I) prepare a project report that clearly documents the designs, decisions, and activities during each phase of the engineering design process.

§127.782. Engineering Science (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
- (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 10-12. Prerequisites: Algebra I and one credit in biology. Recommended prerequisite: Geometry, Integrated Physics and Chemistry (IPC), one credit in chemistry, or one credit in physics. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
- (2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.
- (3) Engineering Science is an engineering course designed to expose students to some of the major concepts and technologies that they will encounter in a postsecondary program of study in any engineering domain. Students will have an opportunity to investigate engineering and high-tech careers. In Engineering Science, students will employ science, technology, engineering, and mathematical concepts in the solution of real-world challenge situations. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.
- (4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (5) Students are expected to know that:
 - (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool

for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

- (9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;
 - (B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;
 - (C) present written and oral communication in a clear, concise, and effective manner;
 - (D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and
 - (E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.
- (2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as dial caliper, micrometer, protractor, compass, scale rulers, multimeter, and circuit components;
 - (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;
 - (F) organize quantitative and qualitative data using spreadsheets, engineering notebooks, graphs, and charts;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
 - (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

- (C) use mathematical calculations to assess quantitative relationships in data; and
- (D) evaluate experimental and engineering designs.
- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
 - (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:
 - (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;
 - (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.
- (6) The student investigates engineering-related fields and career opportunities. The student is expected to:
 - (A) differentiate between engineering and engineering technology;
 - (B) compare the roles or job descriptions for career opportunities in the fields of pure science, engineering, and engineering technology;
 - (C) identify and differentiate between the different engineering disciplines; and
 - (D) demonstrate appropriate oral, written, and visual forms of technical communication.
- (7) The student demonstrates an understanding of design problems and works individually and as a member of a team to solve design problems. The student is expected to:
 - (A) solve design problems individually and in a team;
 - (B) create solutions to existing problems using a design process;
 - (C) use a design brief to identify problem specifications and establish project constraints;
 - (D) use communication to achieve a desired goal within a team; and
 - (E) work as a member of a team to conduct research to develop a knowledge base, stimulate creative ideas, and make informed decisions.
- (8) The student understands mechanisms, including simple and compound machines, and performs calculations related to mechanical advantage, drive ratios, work, and power. The student is expected to:
 - (A) explain the purpose and operation of components, including gears, sprockets, pulley systems, and simple machines;
 - (B) explain how components, including gears, sprockets, pulley systems, and simple machines, make up mechanisms;
 - (C) distinguish between the six simple machines and their attributes and components;

- (D) measure forces and distances related to a mechanism;
 - (E) calculate work and power in mechanical systems;
 - (F) determine experimentally the efficiency of mechanical systems; and
 - (G) calculate mechanical advantage and drive ratios of mechanisms.
- (9) The student understands energy sources, energy conversion, and circuits and performs calculations related to work and power. The student is expected to:
- (A) identify and categorize energy sources as nonrenewable, renewable, or inexhaustible;
 - (B) define and calculate work and power in electrical systems;
 - (C) calculate and explain how power in a system converts energy from electrical to mechanical; and
 - (D) define voltage, current, and resistance and calculate each quantity in series, parallel, and combination electrical circuits using Ohm's law.
- (10) The student understands system energy requirements and how energy sources can be combined to convert energy into useful forms. The student understands the relationships between material conductivity, resistance, and geometry in order to calculate energy transfer and determine power loss and efficiency. The student is expected to:
- (A) explain the purpose of energy management;
 - (B) evaluate system energy requirements in order to select the proper energy source;
 - (C) explain and design how multiple energy sources can be combined to convert energy into useful forms;
 - (D) describe how hydrogen fuel cells create electricity and heat and how solar cells create electricity;
 - (E) measure and analyze how thermal energy is transferred via convection, conduction, and radiation;
 - (F) analyze how thermal energy transfer is affected by conduction, thermal resistance values, convection, and radiation; and
 - (G) calculate resistance, efficiency, and power transfer in power transmission and distribution applications for various material properties.
- (11) The student understands the interaction of forces acting on a body and performs calculations related to structural design. The student is expected to:
- (A) illustrate, calculate, and experimentally measure all forces acting upon a given body;
 - (B) locate the centroid of structural members mathematically or experimentally;
 - (C) calculate moment of inertia of structural members;
 - (D) define and calculate static equilibrium;
 - (E) differentiate between scalar and vector quantities;
 - (F) identify properties of a vector, including magnitude and direction;
 - (G) calculate the X and Y components given a vector;
 - (H) calculate moment forces given a specified axis;
 - (I) calculate unknown forces using equations of equilibrium; and
 - (J) calculate external and internal forces in a statically determinate truss using translational and rotational equilibrium equations.

- (12) The student understands material properties and the importance of choosing appropriate materials for design. The student is expected to:
- (A) conduct investigative non-destructive material property tests on selected common household products;
 - (B) calculate and measure the weight, volume, mass, density, and surface area of selected common household products; and
 - (C) identify the manufacturing processes used to create selected common household products.
- (13) The student uses material testing to determine a product's function and performance. The student is expected to:
- (A) use a design process and mathematical formulas to solve and document design problems;
 - (B) obtain measurements of material samples such as length, width, height, and mass;
 - (C) use material testing to determine a product's reliability, safety, and predictability in function;
 - (D) identify and calculate test sample material properties using a stress-strain curve; and
 - (E) identify and compare measurements and calculations of sample material properties such as elastic range, proportional limit, modulus of elasticity, elastic limit, resilience, yield point, plastic deformation, ultimate strength, failure, and ductility using stress-strain data points.
- (14) The student understands that control systems are designed to provide consistent process control and reliability and uses computer software to create flowcharts and control system operating programs. The student is expected to:
- (A) create detailed flowcharts using a computer software application;
 - (B) create control system operating programs using computer software;
 - (C) create system control programs that use flowchart logic;
 - (D) select appropriate input and output devices based on the need of a technological system; and
 - (E) judge between open- and closed-loop systems in order to select the most appropriate system for a given technological problem.
- (15) The student demonstrates an understanding of fluid power systems and calculates values in a variety of systems. The student is expected to:
- (A) identify and explain basic components and functions of fluid power devices;
 - (B) differentiate between pneumatic and hydraulic systems and between hydrodynamic and hydrostatic systems;
 - (C) use Pascal's Law to calculate values in a fluid power system;
 - (D) distinguish between gauge pressure and absolute pressure and between temperature and absolute temperature;
 - (E) calculate values in a pneumatic system using the ideal gas laws; and
 - (F) calculate and experiment with flow rate, flow velocity, and mechanical advantage in a hydraulic system model.
- (16) The student demonstrates an understanding of statistics and applies the concepts to real-world engineering design problems. The student is expected to:
- (A) calculate and test the theoretical probability that an event will occur;

- (B) calculate the experimental frequency distribution of an event occurring;
 - (C) apply the Bernoulli process to events that only have two distinct possible outcomes;
 - (D) apply AND, OR, and NOT logic to solve complex probability scenarios;
 - (E) apply Bayes's theorem to calculate the probability of multiple events occurring;
 - (F) calculate the central tendencies of a data array, including mean, median, and mode;
 - (G) calculate data variations, including range, standard deviation, and variance; and
 - (H) create and explain a histogram to illustrate frequency distribution.
- (17) The student demonstrates an understanding of kinematics in one and two dimensions and applies the concepts to real-world engineering design problems. The student is expected to:
- (A) calculate distance, displacement, speed, velocity, and acceleration from data;
 - (B) calculate experimentally the acceleration due to gravity given data from a free-fall device;
 - (C) calculate the X and Y components of an object in projectile motion; and
 - (D) determine and test the angle needed to launch a projectile a specific range given the projectile's initial velocity.

§127.785. Engineering Design and Problem Solving (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2022-2023 school year.
- (1) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Algebra I and Geometry. Recommended prerequisites: two credits from the Science, Technology, Engineering, and Mathematics (STEM) Career Cluster. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The STEM Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.
 - (3) The Engineering Design and Problem Solving course is the creative process of solving problems by identifying needs and then devising solutions. The solution may be a product, technique, structure, or process depending on the problem. Science aims to understand the natural world.

while engineering seeks to shape this world to meet human needs and wants. Engineering design takes into consideration limiting factors or "design under constraint." Various engineering disciplines address a broad spectrum of design problems using specific concepts from the sciences and mathematics to derive a solution. The design process and problem solving are inherent to all engineering disciplines.

- (4) Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open-ended, with real-world application. Students will apply critical-thinking skills to justify a solution from multiple design options. Additionally, the course promotes interest in and understanding of career opportunities in engineering.
- (5) This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.
- (6) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.
- (7) Scientific hypotheses and theories. Students are expected to know that:
 - (A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and
 - (B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.
- (8) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.
 - (A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.
 - (B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.
- (9) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (10) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool

for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

- (11) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (12) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;
 - (B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;
 - (C) present written and oral communication in a clear, concise, and effective manner;
 - (D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and
 - (E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.
- (2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:
 - (A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;
 - (B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;
 - (C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;
 - (D) use appropriate tools such as dial caliper, micrometer, protractor, compass, scale rulers, multimeter, and circuit components;
 - (E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;
 - (F) organize quantitative and qualitative data using spreadsheets, engineering notebooks, graphs, and charts;
 - (G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and
 - (H) distinguish between scientific hypotheses, theories, and laws.
- (3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:
 - (A) identify advantages and limitations of models such as their size, scale, properties, and materials;
 - (B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

- (C) use mathematical calculations to assess quantitative relationships in data; and
 - (D) evaluate experimental and engineering designs.
- (4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
- (A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;
 - (B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and
 - (C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.
- (5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:
- (A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;
 - (B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and
 - (C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.
- (6) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:
- (A) communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles, and marketing materials; and
 - (B) draw inferences based on data related to promotional materials for products and services.
- (7) The student applies knowledge of science and mathematics and the tools of technology to solve engineering design problems. The student is expected to:
- (A) select appropriate mathematical models to develop solutions to engineering design problems;
 - (B) integrate advanced mathematics and science skills as necessary to develop solutions to engineering design problems;
 - (C) judge the reasonableness of mathematical models and solutions;
 - (D) investigate and apply relevant chemical, mechanical, biological, electrical, and physical properties of materials to engineering design problems;
 - (E) identify the inputs, processes, outputs, control, and feedback associated with open and closed systems;
 - (F) describe the difference between open-loop and closed-loop control systems;
 - (G) evaluate different measurement tools such as dial caliper, micrometer, protractor, compass, scale rulers, and multimeter, make measurements with accuracy and precision, and specify tolerances; and
 - (H) use conversions between measurement systems to solve real-world problems.
- (8) The student communicates through written documents, presentations, and graphic representations using the tools and techniques of professional engineers. The student is expected to:

- (A) communicate visually by sketching and creating technical drawings using established engineering graphic tools, techniques, and standards;
 - (B) read and comprehend technical documents, including specifications and procedures;
 - (C) prepare written documents such as memorandums, emails, design proposals, procedural directions, letters, and technical reports using the formatting and terminology conventions of technical documentation;
 - (D) organize information for visual display and analysis using appropriate formats for various audiences, including technical drawings, graphs, and tables such as file conversion and appropriate file types, in order to collaborate with a wider audience;
 - (E) evaluate the quality and relevance of sources and cite appropriately; and
 - (F) defend a design solution in a presentation.
- (9) The student recognizes the history, development, and practices of the engineering professions. The student is expected to:
- (A) identify and describe career options, working conditions, earnings, and educational requirements of various engineering disciplines such as those listed by the Texas Board of Professional Engineers;
 - (B) recognize that engineers are guided by established codes emphasizing high ethical standards;
 - (C) explore the differences, similarities, and interactions between engineers, scientists, and mathematicians;
 - (D) describe how technology has evolved in the field of engineering and consider how it will continue to be a useful tool in solving engineering problems;
 - (E) discuss the history and importance of engineering innovation on the U.S. economy and quality of life; and
 - (F) describe the importance of patents and the protection of intellectual property rights.
- (10) The student creates justifiable solutions to open-ended real-world problems using engineering design practices and processes. The student is expected to:
- (A) identify and define an engineering problem;
 - (B) formulate goals, objectives, and requirements to solve an engineering problem;
 - (C) determine the design parameters associated with an engineering problem such as materials, personnel, resources, funding, manufacturability, feasibility, and time;
 - (D) establish and evaluate constraints pertaining to a problem, including health, safety, social, environmental, ethical, political, regulatory, and legal;
 - (E) identify or create alternative solutions to a problem using a variety of techniques such as brainstorming, reverse engineering, and researching engineered and natural solutions;
 - (F) test and evaluate proposed solutions using methods such as creating models, prototypes, mock-ups, or simulations or performing critical design review, statistical analysis, or experiments;
 - (G) apply structured techniques to select and justify a preferred solution to a problem such as a decision tree, design matrix, or cost-benefit analysis;
 - (H) predict performance, failure modes, and reliability of a design solution; and
 - (I) prepare a project report that clearly documents the designs, decisions, and activities during each phase of the engineering design process.
- (11) The student manages an engineering design project. The student is expected to:

- (A) participate in the design and implementation of a real-world or simulated engineering project using project management methodologies, including initiating, planning, executing, monitoring and controlling, and closing a project;
- (B) develop a plan and project schedule for completion of a project;
- (C) work in teams and share responsibilities, acknowledging, encouraging, and valuing contributions of all team members;
- (D) compare and contrast the roles of a team leader and other team member responsibilities;
- (E) identify and manage the resources needed to complete a project;
- (F) use a budget to determine effective strategies to meet cost constraints;
- (G) create a risk assessment for an engineering design project;
- (H) analyze and critique the results of an engineering design project; and
- (I) maintain an engineering notebook that chronicles work such as ideas, concepts, inventions, sketches, and experiments.

§127.786. Introduction to Computer-Aided Design and Drafting (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
 - (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2022-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 9-12. Recommended Prerequisite: Principles of Applied Engineering, Principles of Architecture and Design, or Principles of Manufacturing. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.
 - (3) Introduction to Computer-Aided Design and Drafting (CADD) allows students to acquire knowledge and skills needed to use design software, including an introduction to CADD equipment and software selection and interfaces. Students gain skills in setting up a CADD workstation; upgrading a computer to run advanced CADD software; working with storage devices; storing, retrieving, backing-up, and sharing databases, file servers, and local area networks (LANs); and transferring drawing files over the internet.

- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) describe the roles, responsibilities, and dynamics of a team as applied in appropriate industry fields;
 - (B) explain employers' work expectations;
 - (C) use effective and accurate architectural or engineering vocabulary throughout design and drafting process;
 - (D) demonstrate knowledge of the concepts and skills related to health in the workplace; and
 - (E) demonstrate safety in the workplace as specified by appropriate governmental regulations.
- (2) The student demonstrates knowledge of the CADD software. The student is expected to:
 - (A) describe computer-aided design, drafting, and CADD applications;
 - (B) demonstrate how to start and exit CADD software without corrupting files;
 - (C) use draw files;
 - (D) save, close, and open saved files;
 - (E) determine and specify drawing units and limits;
 - (F) describe and use the Cartesian coordinate system;
 - (G) use drawing snap and grid functions; and
 - (H) demonstrate the use of dynamic input and the command line.
- (3) The student demonstrates the use of CADD tools for basic drawing and plotting. The student is expected to:
 - (A) draw objects using the line tool;
 - (B) draw circles, arcs, ellipses, and elliptical arcs;
 - (C) draw polylines, rectangles, donuts, and filled circles;
 - (D) draw true spline curves;
 - (E) create drawing templates;
 - (F) describe basic line conventions;
 - (G) create and manage layers;
 - (H) draw objects on separate layers;
 - (I) print and plot drawings;
 - (J) demonstrate organizational skills to influence the sequential process when creating drawings;
 - (K) construct geometric figures of lines, splines, circles, and arcs;
 - (L) create and edit text using appropriate style and size to annotate drawings;

- (M) use control accuracy enhancement tools for entity positioning methods such as snap and xyz;
 - (N) use editing commands;
 - (O) use viewing commands to perform zooming and panning;
 - (P) plot drawings on media using layout and scale;
 - (Q) use query commands to interrogate database for entity characteristics, distance, area, and status;
 - (R) move, stretch, and offset objects;
 - (S) create a radius between objects;
 - (T) trim and extend objects;
 - (U) break and join objects;
 - (V) change object properties; and
 - (W) create hatching and manipulate properties such as calculating the area of an enclosed shape.
- (4) The student demonstrates the use of CADD tools display and viewpoints. The student is expected to:
- (A) create multiple viewpoints in the drawing window;
 - (B) select appropriate object snaps for various drawing tasks;
 - (C) create orthographic drawings;
 - (D) analyze challenges and identify solutions for design problems;
 - (E) investigate the use of space, scale, and environmental features to create three-dimensional form or the illusion of depth and form;
 - (F) prepare multi-view scaled drawings;
 - (G) select proper drawing scale, views, and layout;
 - (H) create drawings containing horizontal and vertical surfaces;
 - (I) create drawings containing circles and arcs;
 - (J) create removed details and conventional breaks using sectional drawing techniques;
 - (K) create assembly drawings;
 - (L) create detail drawings; and
 - (M) create technical drawings and title blocks associated with the different CAD drawings.
- (5) The student demonstrates the use of software tools to properly create text within a CADD drawing. The student is expected to:
- (A) use proper text standards for technical drawings;
 - (B) calculate drawing scale and text height using a scale ratio;
 - (C) apply text styles to enhance readability of drawings;
 - (D) demonstrate the use of tools to create multi-line text objects and single-line text;
 - (E) edit existing text; and
 - (F) create, insert, and modify tables.

- (6) The student demonstrates the use of CADD editing tools within drawings. The student is expected to:
- (A) draw chamfers and fillets;
 - (B) use editing tools to modify existing drawings;
 - (C) edit polylines and splines;
 - (D) move and copy objects;
 - (E) create mirror images and align objects; and
 - (F) scale and array objects.
- (7) The student demonstrates the use of grips in drawings. The student is expected to:
- (A) apply grips to stretch, move, rotate, scale, mirror, and copy objects;
 - (B) demonstrate the use of Quick Properties and the Properties palette to access CADD tools; and
 - (C) create selections by using the Quick Select dialog box.
- (8) The student demonstrates the use of scale and dimension standards and practices. The student is expected to:
- (A) apply standard dimensioning rules;
 - (B) draw scales and dimensions;
 - (C) create, edit, and manage dimension styles;
 - (D) add linear and angular dimensions to a drawing;
 - (E) draw datum and chain dimensions;
 - (F) dimension circles and arcs;
 - (G) control the appearance of existing dimensions and dimension text; and
 - (H) change dimension line spacing and alignment.
- (9) The student creates and demonstrates standard blocks using tool palettes. The student is expected to:
- (A) create and save text information blocks;
 - (B) insert blocks into a drawing;
 - (C) edit and update a block in a drawing;
 - (D) create blocks as a drawing file;
 - (E) construct and use a symbol library of blocks; and
 - (F) purge unused items from a drawing.
- (10) The student prepares surface developments. The student is expected to:
- (A) prepare developments of prisms, cylinders, cones, and pyramids;
 - (B) prepare developments of a transition piece; and
 - (C) prepare drawings involving intersecting pieces.
- (11) The student designs and prepares basic architectural drawings. The student is expected to:
- (A) solve design problems to gain new perspectives;
 - (B) apply critical-thinking and problem-solving skills to develop creative solutions for design problems;

- (C) draw a site plan;
 - (D) draw a floor plan;
 - (E) draw interior and exterior elevations;
 - (F) draw a roof plan;
 - (G) prepare door and window schedules;
 - (H) draw wall sections;
 - (I) draw a plot plan; and
 - (J) draw an electrical and reflected ceiling plan.
- (12) The student designs and prepares a technical drawing. The student is expected to:
- (A) draw individual parts;
 - (B) draw the closed assembly drawings per the parts; and
 - (C) draw and explode the assembly with the parts list.

§127.787. Intermediate Computer-Aided Design and Drafting (One Credit), Adopted 2021.

- (a) Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year.
- (1) No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.
 - (2) If the commissioner makes the determination that instructional materials funding has been made available this section shall be implemented beginning with the 2024-2025 school year and apply to the 2022-2025 and subsequent school years.
 - (3) If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.
- (b) ~~(a)~~ General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Architectural Design I, Introduction to Computer-Aided Design and Drafting, or Engineering Design and Presentation I. Students shall be awarded one credit for successful completion of this course.
- (c) ~~(b)~~ Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
 - (2) The Science, Technology, Engineering, and Science (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.
 - (3) In Intermediate Computer-Aided Design and Drafting (CADD), students develop practices and techniques used in computer-aided drafting, emphasizing the development and use of prototype drawings, construction of pictorial drawings, construction of three-dimensional drawings, interfacing two-dimensional and three-dimensional environments, and extracting data. Basic rendering techniques will also be developed. Emphasis is placed on drawing set-up; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling

objects; adding text and dimensions; using layers and coordinating systems, as well as using input and output devices.

- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) ~~(e)~~ Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

- (A) describe the roles, responsibilities, and dynamics of a team as applied in appropriate industry fields;
- (B) explain employers' work expectations;
- (C) demonstrate knowledge of the concepts and skills related to health and safety in the workplace as specified by appropriate governmental regulations;
- (D) evaluate and justify decisions based on ethical reasoning;
- (E) evaluate alternative responses to workplace situations based on personal, professional, ethical, and legal responsibilities and employer policies;
- (F) identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace;
- (G) interpret and explain written organizational policies and procedures; and
- (H) demonstrate personal responsibility, ethics, and integrity, including respect for intellectual property, when accessing information and creating design projects.

(2) The student demonstrates an understanding of CADD terminology, tools, and symbols. The student is expected to:

- (A) apply the Cartesian Coordinate Systems to illustrate the application of Z coordinates;
- (B) describe the CADD menu structure;
- (C) differentiate between type-in commands, icons, and pulldown menus;
- (D) manipulate the standard draw commands;
- (E) demonstrate modifying commands;
- (F) explain the various modes of viewing drawings; and
- (G) define and modify dimension styles.

(3) The student produces hand sketches to organize ideas and communicate design ideas. The student is expected to:

- (A) demonstrate the use of graphic descriptions;
- (B) develop skill in sketching or mark making to plan, execute, and construct two-dimensional images and three-dimensional models;
- (C) demonstrate methods of projection; and
- (D) use proper drafting techniques to convert sketches into an electronic drawing using CADD.

(4) The student demonstrates an understanding of commands in a CADD system. The student is expected to:

- (A) operate CADD software;

- (B) demonstrate draw commands;
 - (C) modify drawn objects in CADD software;
 - (D) create two-dimensional and three-dimensional objects;
 - (E) convert two-dimensional drawings to three-dimensional drawings;
 - (F) convert three-dimensional drawings to two-dimensional drawings;
 - (G) prepare text blocks in CADD software;
 - (H) manipulate an external reference or file;
 - (I) import files of different formats into CADD;
 - (J) demonstrate the plot command in print or plot drawings; and
 - (K) import and export data using attributes.
- (5) The student preforms computer-aided drafting functions. The student is expected to:
- (A) create text styles, text justification, and multi-line text;
 - (B) create and use multi-leaders;
 - (C) edit dimensions;
 - (D) work with dimension styles;
 - (E) crosshatch objects;
 - (F) isolate and hide objects;
 - (G) use selection set methods;
 - (H) use rectangular, polar, and path arrays;
 - (I) use rotation reference angles;
 - (J) use elements of creativity and organizational principles to create visually coherent viewports and layouts;
 - (K) create and manage layers and properties;
 - (L) use page setup for plotting;
 - (M) create, insert, and edit reusable content such as symbols and blocks;
 - (N) use specific line types using the Standard Alphabet of Lines;
 - (O) create fills and gradients; and
 - (P) edit hatch patterns and fills.
- (6) The student creates drawings using the CADD software. The student is expected to:
- (A) translate hand sketches into CADD software;
 - (B) create projected mechanical drawings;
 - (C) create drawings with external references;
 - (D) complete a three-dimensional parametric model;
 - (E) organize a complex assembly, including an animated exploded assembly;
 - (F) compare various methods of drawing solids;
 - (G) construct a composite drawing using multiple drawings;
 - (H) justify correct drawing methods;

- (I) draw lines, arcs, and circles to represent plans or mechanical assemblies;
 - (J) create text styles, text justification, and multi-line text;
 - (K) create and use multi-leaders;
 - (L) edit dimensions, including dimension styles;
 - (M) isolate and hide objects;
 - (N) use selection set methods;
 - (O) use elements of creativity and organizational principles to create visually coherent viewports and layouts;
 - (P) create and manage layers;
 - (Q) use page setup for plotting; and
 - (R) prepare multi-view drawings, including sectional and auxiliary views.
- (7) The student creates electrical drawings. The student is expected to:
- (A) prepare schematic drawings;
 - (B) prepare printed circuit board assembly drawing packages;
 - (C) prepare connection drawings;
 - (D) prepare interconnection drawings;
 - (E) prepare wiring drawings;
 - (F) prepare cable drawings and/or harness drawings;
 - (G) prepare component drawings; and
 - (H) prepare logic diagrams.
- (8) The student creates mechanical drawings. The student is expected to:
- (A) prepare fastener, cam, gear, spring, and bearing drawings;
 - (B) prepare detail drawings;
 - (C) prepare surface developments;
 - (D) prepare welding drawings;
 - (E) prepare bearing drawings;
 - (F) prepare casting drawings;
 - (G) prepare forging drawings;
 - (H) prepare tool drawings;
 - (I) prepare molding diagrams;
 - (J) prepare stamping drawings;
 - (K) prepare numerical-control drawings;
 - (L) modify drawings to include material specifications and parts list; and
 - (M) identify geometric tolerances and dimensioning of specific machined surfaces.
- (9) The student prepares CADD project designs. The student is expected to:
- (A) develop a floor plan depicting all elements of the building, including BIM (building information modeling);
 - (B) render a site plan that depicts all elements of the site;

- (C) render exterior and interior elevations;
- (D) draw a specified roof type within a plan;
- (E) prepare door and window schedules;
- (F) draw a wall and building section;
- (G) draw an overall site plan;
- (H) draw a building plot plan;
- (I) review and revise plans throughout the design process to refine and achieve design objective;
- (J) demonstrate flexibility and adaptability throughout the design process; and
- (K) define a basic project materials list.

**Proposed Repeal of 19 TAC Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, §§130.161-130.166; Subchapter G, §§130.201-130.211; Subchapter H, §§130.221-130.234; Subchapter I, §§130.251-130.263; Subchapter L, §§130.331-130.343; Subchapter O, §§130.401-130.435; and Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, §§127.309-127.314; Subchapter I, §§127.402-127.415; Subchapter J, §§127.468-127.480; Subchapter M, §§127.625-127.648; and Subchapter O, §§127.742-127.776
(First Reading and Filing Authorization)**

November 19, 2021

**COMMITTEE OF THE FULL BOARD: ACTION
STATE BOARD OF EDUCATION: ACTION**

SUMMARY: This item presents for first reading and filing authorization the proposed repeal of 19 Texas Administrative Code (TAC) Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, Education and Training, §§130.161-130.166; Subchapter G, Government and Public Administration, §§130.201-130.211; Subchapter H, Health Science, §§130.221-130.234; Subchapter I, Hospitality and Tourism, §§130.251-130.263; Subchapter L, Law, Public Safety, Corrections, and Security, §§130.331-130.343; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§130.401-130.435; and proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.309-127.314; Subchapter I, Health Science, §§127.402-127.415; Subchapter J, Hospitality and Tourism, §§127.468-127.480; Subchapter M, Law and Public Service, §§127.625-127.648 ; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.742-127.776. The proposed rule actions would repeal Texas Essential Knowledge and Skills (TEKS) for career and technical education (CTE) in subchapters that are being revised and move the TEKS for existing CTE courses in these subchapters to 19 TAC Chapter 127 in order to keep all the TEKS for revised subchapters together in administrative rule and avoid confusion.

STATUTORY AUTHORITY: Texas Education Code (TEC), §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2), and (b-17).

TEC, §7.102(c)(4), requires the State Board of Education (SBOE) to establish curriculum and graduation requirements.

TEC, §28.002(a), identifies the subjects of the required curriculum.

TEC, §28.002(c), requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments.

TEC, §28.002(n), allows the SBOE to by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the CTE curriculum required in TEC, §28.002.

TEC, §28.002(o), requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement.

TEC, §28.025(a), requires the SBOE to by rule determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002.

TEC, §28.025(b-2), requires the SBOE to by rule allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under TEC, §28.025(b-1)(2), or the third and fourth science credits under TEC, §28.025(b-1)(3), by successfully completing a CTE course designated by the SBOE as containing substantially similar and rigorous content.

TEC, §28.025(b-17), requires the SBOE by rule to ensure that a student may comply with curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

The full text of statutory citations can be found in the statutory authority section of this agenda.

EFFECTIVE DATE: The proposed effective date of the proposed rule actions is 20 days after filing as adopted with the Texas Register. Under TEC, §7.102(f), the SBOE must approve the rule action at second reading and final adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2022-2023 school year. The earlier effective date will allow the TEKS in subchapters that were revised in Chapter 130 to move to Chapter 127 to avoid confusion.

PREVIOUS BOARD ACTION: The SBOE adopted the TEKS for CTE, including career development, in 19 TAC Chapters 119-125 and 127 to be effective September 1, 1998. The SBOE approved revisions to the CTE TEKS in Chapter 127 and new Chapter 130, Subchapters A-P, August 23, 2010. In 2015, the CTE TEKS were amended to be effective August 28, 2017. In 2018, the SBOE adopted revisions to 19 TAC Chapter 130, Subchapters B, H, M, and O, to be effective March 27, 2018. The CTE TEKS were last amended in 2020 when the SBOE adopted revisions to 19 TAC Chapter 130, Subchapters A, C, K, O, and Q, to be effective August 1, 2020.

BACKGROUND INFORMATION AND JUSTIFICATION: Currently, CTE TEKS for career development courses for middle and high school are codified in 19 TAC Chapter 127, Subchapters A and B. The TEKS for courses associated with 17 CTE career clusters are codified by subchapter in 19 TAC Chapter 130, Subchapters A-Q. In December 2020, the SBOE began initial steps to prepare for the review and revision of CTE courses in programs of study for the education and training, health science, and science, technology, engineering, and mathematics (STEM) career clusters. Two additional courses eligible to satisfy a graduation requirement in science are also part of the review. At the September SBOE meeting, the board approved for first reading and filing authorization proposed new TEKS for these courses.

Due to the current structure of Chapter 130, there are not enough sections to add the new CTE courses under consideration in their assigned subchapters. To accommodate the addition of new and future courses, it is recommended that the CTE TEKS in Chapter 130 be moved to existing 19 TAC Chapter 127 and that the chapter be renamed "Texas Essential Knowledge and Skills for Career Development and Career and Technical Education." Consequently, the TEKS for existing CTE courses from the subchapters under revision will be repealed from Chapter 130 and moved into their new subchapters in Chapter 127 in order to keep all the TEKS for revised subchapters together in administrative rule and avoid confusion.

The proposed repeal would remove the TEKS in Chapter 130 for Subchapters E, G, H, I, L, and O, and related implementation language that will be superseded by new TEKS. The proposed new courses would move the courses repealed from Chapter 130 to Chapter 127, Subchapters G, I, J, M, and O. No changes

are being proposed to the existing CTE courses as part of the move to Chapter 127. However, the related implementation sections will be updated to reflect new course numbers.

The text of 19 TAC §§130.161-130.166, 130.201-130.211, 130.221-130.234, 130.251-130.263, 130.331-130.343, and 130.401-130.435 proposed for repeal is not included as an attachment to this item due to the volume of rules; however, the rules are viewable on the Texas Education Agency (TEA) website at <https://tea.texas.gov/about-tea/laws-and-rules/texas-administrative-code/19-tac-chapter-130>.

Second reading and final adoption of proposed new 19 TAC Chapter 127, Subchapters G, I, J, M, and O, is presented as a separate item in this agenda.

The proposed repeals and new courses were not presented as a discussion item. The SBOE, however, may wish to consider this item for first reading and filing authorization as authorized under its operating procedures. Therefore, this item is presented for consideration for first reading and filing authorization at this meeting. It is recommended the SBOE consider this item for first reading and filing authorization to ensure that existing CTE courses from Chapter 130 are kept together with the new CTE courses being added to Chapter 127.

FISCAL IMPACT: TEA has determined that there are no additional costs to state or local government required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would repeal existing regulations and create new regulations by transferring existing CTE TEKS from Chapter 130 to Chapter 127.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand or limit an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: The proposal would improve access to and organization of the CTE TEKS and avoid confusion regarding the revised TEKS. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins December 17, 2021, and ends at 5:00 p.m. on January 21, 2022. The SBOE will take registered oral and written comments on the proposal at the appropriate committee meeting in January 2022 in accordance with the SBOE board operating policies and procedures. A request for a public hearing on the proposal submitted under the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the *Texas Register* on December 17, 2021.

MOTION TO BE CONSIDERED: The State Board of Education:

Suspend the board operating procedures in accordance with §5.2(a) to allow consideration at first reading and filing authorization; and

Approve for first reading and filing authorization proposed repeal of 19 TAC Chapter 130, Texas Essential Knowledge and Skills for Career and Technical Education, Subchapter E, Education and Training, §§130.161-130.166; Subchapter G, Government and Public Administration, §§130.201-130.211; Subchapter H, Health Science, §§130.221-130.234; Subchapter I, Hospitality and Tourism, §§130.251-130.263; Subchapter L, Law, Public Safety, Corrections, and Security, §§130.331-130.343; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§130.401-130.435; and

Approve for first reading and filing authorization proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.309-127.314; Subchapter I, Health Science, §§127.402-127.415; Subchapter J, Hospitality and Tourism, §§127.468-127.480; Subchapter M, Law and Public Service, §§127.625-127.650; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.742-127.776.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

**Discussion of Proposed Amendments to 19 TAC Chapter 74, Curriculum Requirements,
Subchapter B, Graduation Requirements**

November 17, 2021

**COMMITTEE OF THE FULL BOARD: DISCUSSION
STATE BOARD OF EDUCATION: NO ACTION**

SUMMARY: This item provides an opportunity for the committee to discuss proposed amendments to 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements, Subchapter B, Graduation Requirements. The proposed amendments would update the high school graduation requirements to align with Senate Bill (SB) 369 and 1063, 87th Texas Legislature, Regular Session, 2021; update course titles; add new courses to satisfy specific graduation requirements; and make technical edits.

STATUTORY AUTHORITY: Texas Education Code (TEC), §§7.102(c)(4); 28.025(a), (b-1), as amended by SB 1063, 87th Texas Legislature, Regular Session, 2021, (b-3), (b-14), (b-17), (c), (c-1), and (c-2); and 28.0256(a) and (b) and (d), as amended by SB 369, 87th Texas Legislature, Regular Session, 2021.

TEC, §7.102(c)(4), requires the State Board of Education (SBOE) to establish curriculum and graduation requirements.

TEC, §28.025(a), requires the SBOE to determine by rule the curriculum requirements for the foundation high school program that are consistent with the required curriculum and requires the SBOE to designate specific courses that are required for the foundation high school program.

TEC, §28.025(b-1), as amended by SB 1063, 87th Texas Legislature, Regular Session, 2021, requires the SBOE to determine by rule specific courses for graduation under the foundation high school program.

TEC, §28.025(b-3), requires the SBOE to approve a variety of advanced English, mathematics, and science courses that can be taken to fulfill the foundation high school program.

TEC, §28.025(b-14), requires the SBOE to allow a student receiving special education services to substitute the languages other than English requirement with two credits in English language arts, mathematics, science, or social studies or two credits in career and technology education, technology applications, or other academic electives.

TEC, §28.025(b-17), requires the SBOE to adopt rules that ensure a student who successfully completes an advanced career and technical education course, including a course that may lead to an industry-recognized credential or certificate or an associate degree may comply with elective requirements for graduation.

TEC, §28.025(c), requires that, in order to receive a high school diploma, a student must complete the curriculum requirements identified by the SBOE and comply with the financial aid application requirement in accordance with TEC, §28.0256.

TEC, §28.025(c-1), requires the SBOE to adopt rules regarding earning an endorsement.

TEC, §28.025(c-2), requires the SBOE to adopt rules for earning an endorsement that include four credits in mathematics and four credits in science.

TEC, §28.0256(a), requires each student to complete and submit a free application for federal student aid (FAFSA) or a Texas application for state financial aid (TASFA) before graduating from high school.

TEC, §28.0256(b), provides an exception to students to opt out of the financial aid application requirement under TEC, §28.0256(a), by submitting a form signed by a parent, guardian, or student aged 18 years old or older, that authorizes the student to decline to comply with the financial aid application graduation requirement. A high school counselor may also authorize a student to decline to comply with the financial aid application graduation requirement for good cause.

TEC, §28.0256(d), as amended by SB 369, 87th Texas Legislature, Regular Session, 2021, specifies that if a school counselor notifies a school district whether a student has complied with the requirement under TEC, §28.0256(a) or (b), the school counselor may only indicate whether the student has complied with this section and may not indicate the manner in which the student complied. A school counselor may not indicate that a student has not complied with the requirement if the school district or charter school fails to provide the form.

The full text of statutory citations can be found in the statutory authority section of this agenda.

FUTURE ACTION EXPECTED: The proposed amendments to Chapter 74, Subchapter B, will be presented for first reading and filing authorization at the January 2022 SBOE meeting.

BACKGROUND INFORMATION AND JUSTIFICATION: SB 1063, 87th Texas Legislature, Regular Session, 2021, amended TEC, §28.025(b-1), to add personal financial literacy and economics as an option to satisfy graduation requirements for social studies under the foundation high school program. Section 74.12 would be updated to add the new credit option.

At the November 2020 SBOE meeting, the board approved for second reading and final adoption 19 TAC Chapter 116, Texas Essential Knowledge and Skills for Physical Education. The effective date for the new Texas Essential Knowledge and Skills (TEKS) for physical education is August 1, 2022. The board approved the inclusion of new TEKS for three new high school physical education courses in Lifetime Fitness and Wellness Pursuits, Lifetime Recreation and Outdoor Pursuits, and Skill-based Lifetime Activities that will replace Foundations of Personal Fitness, Adventure/Outdoor Education, Aerobic Activities, and Team or Individual Sports. Section 74.12 would be updated to add the new physical education courses to satisfy specific graduation requirements.

At the June 2021 SBOE meeting, the board approved for second reading and final adoption 19 TAC §112.51, Specialized Topics in Science, with an effective date of August 1, 2022. The board also amended the title of the Earth and Space Science course to Earth Systems Science. Section 74.12 and §74.13 would be updated to add the new course and update the course title to satisfy specific graduation requirements.

At the September 2021 SBOE meeting, the board began revising career and technical education (CTE) courses currently codified in 19 TAC Chapter 130. Due to the current structure of Chapter 130, there are not enough section numbers available to add all of the proposed new courses in their assigned subchapters. To accommodate the addition of these new courses and future courses, it is recommended that the CTE TEKS in Chapter 130 be moved to existing 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, and that the chapter be renamed "Texas Essential Knowledge and Skills for Career Development and Career and Technical Education." The move of CTE subchapters from Chapter 130 to Chapter 127 will take place over time as the TEKS in each subchapter are revised. The board approved new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for

Career Development, Subchapters G, I, J, M, and O, for first reading and filing authorization at the September 2021 SBOE meeting. Section 74.11 and §74.13 would be updated to reflect the move of CTE TEKS from Chapter 130 to Chapter 127 as well as the proposed new title for Chapter 127.

The attachment to this item reflects the text of proposed amendments to 19 TAC Chapter 74, Subchapter B, for consideration by the SBOE for discussion.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Attachment:

Text of Proposed Amendments to 19 TAC Chapter 74, Curriculum Requirements, Subchapter B, Graduation Requirements

ATTACHMENT
Text of Proposed Amendments to 19 TAC

Chapter 74. Curriculum Requirements

Subchapter B. Graduation Requirements

§74.11. High School Graduation Requirements.

- (a) To receive a high school diploma, a student entering Grade 9 in the 2014-2015 school year and thereafter must complete the following:
 - (1) in accordance with subsection (d) of this section, requirements of the Foundation High School Program specified in §74.12 of this title (relating to Foundation High School Program);
 - (2) testing requirements for graduation as specified in Chapter 101 of this title (relating to Assessment); and
 - (3) demonstrated proficiency, in Grade 8 or higher, as determined by the district in which the student is enrolled, in delivering clear verbal messages; choosing effective nonverbal behaviors; listening for desired results; applying valid critical-thinking and problem-solving processes; and identifying, analyzing, developing, and evaluating communication skills needed for professional and social success in interpersonal situations, group interactions, and personal and professional presentations.
- (b) Beginning with students enrolled in Grade 12 during the 2021-2022 school year, each student in Grade 12 must complete and submit a free application for federal student aid (FAFSA) or a Texas application for state financial aid (TASFA) before graduating from high school. A student may graduate under the Foundation High School Program without completing a financial aid application if:
 - (1) the student's parent or other person standing in parental relation submits a signed form, approved by the Texas Education Agency (TEA), indicating that the parent or other person authorizes the student to decline to complete and submit the financial aid application;
 - (2) the student signs and submits the form described by paragraph (1) of this subsection on the student's own behalf if the student is 18 years of age or older or has been emancipated under Texas Family Code, Chapter 31; or
 - (3) a school counselor authorizes the student to decline to complete and submit the financial aid application for good cause, as determined by the school counselor. If a school counselor notifies a school district that a student has declined to complete and submit a financial aid application for good cause, the school counselor may not indicate details regarding what constitutes good cause.
- (c) A school district shall clearly indicate the distinguished level of achievement under the Foundation High School Program, an endorsement, and a performance acknowledgment on the transcript or academic achievement record (AAR) of a student who satisfies the applicable requirements.
- (d) A student entering Grade 9 in the 2014-2015 school year and thereafter shall enroll in the courses necessary to complete the curriculum requirements for the Foundation High School Program specified in §74.12 of this title and the curriculum requirements for at least one endorsement specified in §74.13 of this title (relating to Endorsements).
- (e) A student may graduate under the Foundation High School Program without earning an endorsement if, after the student's sophomore year:
 - (1) the student and the student's parent or person standing in parental relation to the student are advised by a school counselor of the specific benefits of graduating from high school with one or more endorsements; and
 - (2) the student's parent or person standing in parental relation to the student files with a school counselor written permission, on a form adopted by the TEA, allowing the student to graduate under the Foundation High School Program without earning an endorsement.

- (f) A student may earn a distinguished level of achievement by successfully completing the curriculum requirements for the Foundation High School Program and the curriculum requirements for at least one endorsement required by the Texas Education Code (TEC), §28.025(b-15), including four credits in science and four credits in mathematics to include Algebra II.
- (g) An out-of-state or out-of-country transfer student (including foreign exchange students) or a transfer student from a Texas nonpublic school is eligible to receive a Texas diploma but must complete all requirements of this section to satisfy state graduation requirements. Any course credit required in this section that is not completed by the student before he or she enrolls in a Texas school district may be satisfied through the provisions of §74.23 of this title (relating to Correspondence Courses and Distance Learning) and §74.24 of this title (relating to Credit by Examination) or by completing the course or courses according to the provisions of §74.26 of this title (relating to Award of Credit).
- (h) Elective credits may be selected from the following:
 - (1) high school courses not required for graduation that are listed in the following chapters of this title:
 - (A) Chapter 110 of this title (relating to Texas Essential Knowledge and Skills for English Language Arts and Reading);
 - (B) Chapter 111 of this title (relating to Texas Essential Knowledge and Skills for Mathematics);
 - (C) Chapter 112 of this title (relating to Texas Essential Knowledge and Skills for Science);
 - (D) Chapter 113 of this title (relating to Texas Essential Knowledge and Skills for Social Studies);
 - (E) Chapter 114 of this title (relating to Texas Essential Knowledge and Skills for Languages Other Than English);
 - (F) Chapter 115 of this title (relating to Texas Essential Knowledge and Skills for Health Education);
 - (G) Chapter 116 of this title (relating to Texas Essential Knowledge and Skills for Physical Education);
 - (H) Chapter 117 of this title (relating to Texas Essential Knowledge and Skills for Fine Arts);
 - (I) Chapter 127 of this title (relating to Texas Essential Knowledge and Skills for Career Development and Career and Technical Education); and
 - (J) Chapter 130 of this title (relating to Texas Essential Knowledge and Skills for Career and Technical Education);
 - (2) state-approved innovative courses as specified in §74.27 of this title (relating to Innovative Courses and Programs);
 - (3) Junior Reserve Officer Training Corps (JROTC)--one to four credits;
 - (4) Driver Education--one-half credit; and
 - (5) College preparatory English language arts or mathematics courses developed and offered pursuant to the TEC, §28.014.
- (i) Courses offered for dual credit at or in conjunction with an institution of higher education that provide advanced academic instruction beyond, or in greater depth than, the essential knowledge and skills for the equivalent high school course required for graduation may satisfy graduation requirements, including requirements for required courses, advanced courses, and courses for elective credit as well as requirements for endorsements.
- (j) A student may not be enrolled in a course that has a required prerequisite unless:
 - (1) the student has successfully completed the prerequisite course(s);

- (2) the student has demonstrated equivalent knowledge as determined by the school district; or
 - (3) the student was already enrolled in the course in an out-of-state, an out-of-country, or a Texas nonpublic school and transferred to a Texas public school prior to successfully completing the course.
- (k) A district may award credit for a course a student completed without meeting the prerequisites if the student completed the course in an out-of-state, an out-of-country, or a Texas nonpublic school where there was not a prerequisite.
 - (l) A district shall allow a student who successfully completes AP Computer Science A or IB Computer Science Higher Level to satisfy both one advanced mathematics requirement and one languages other than English requirement for graduation.
 - (m) Each school district shall annually report to the TEA the names of the locally developed courses, programs, institutions of higher education, and internships in which the district's students have enrolled as authorized by the TEC, §28.002(g-1). The TEA shall make available information provided under this subsection to other districts. If a district chooses, it may submit any locally developed course for approval under §74.27 of this title as an innovative course.
 - (n) Each school district shall annually report to the TEA the names of cybersecurity courses approved by the board of trustees for credit and the institutions of higher education in which the district's students have enrolled as authorized by the TEC, §28.002(g-3). The TEA shall make available information provided under this subsection to other districts. If a district chooses, it may submit any locally developed course for approval under §74.27 of this title as an innovative course.
 - (o) A school district shall permit a student to comply with the curriculum requirements under the Foundation High School Program by successfully completing appropriate courses in the core curriculum of an institution of higher education (IHE). A student who has completed the core curriculum of an IHE in accordance with TEC, §61.822, as certified by the IHE in accordance with §4.28 of this title (relating to Core Curriculum):
 - (1) is considered to have earned an endorsement by successfully completing the appropriate courses for that endorsement;
 - (2) is considered to have earned a distinguished level of achievement under the Foundation High School Program; and
 - (3) is entitled to receive a high school diploma.

§74.12. Foundation High School Program.

- (a) Credits. A student must earn at least 22 credits to complete the Foundation High School Program.
- (b) Core courses. A student must demonstrate proficiency in the following.
 - (1) English language arts--four credits. Two of the credits must consist of English I and II. (Students with limited English proficiency who are at the beginning or intermediate level of English language proficiency, as defined by §74.4(d) of this title (relating to English Language Proficiency Standards), may satisfy the English I and English II graduation requirements by successfully completing English I for Speakers of Other Languages and English II for Speakers of Other Languages.) A third credit must consist of English III, a comparable Advanced Placement (AP) English language arts course that does not count toward another credit required for graduation, or a comparable International Baccalaureate (IB) English language arts course that meets all the requirements in §110.33 of this title (relating to English Language Arts and Reading, English III (One Credit), Beginning with School Year 2009-2010). A fourth credit may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements, from the following courses:
 - (A) English IV;
 - (B) Independent Study in English;

- (C) Literary Genres;
 - (D) Creative Writing;
 - (E) Research and Technical Writing;
 - (F) Humanities;
 - (G) Public Speaking III;
 - (H) Communication Applications, which must be combined with another half credit from the other courses listed in subparagraphs (A)-(G) and (I)-(S) of this paragraph;
 - (I) Oral Interpretation III;
 - (J) Debate III;
 - (K) Independent Study in Speech;
 - (L) Independent Study in Journalism;
 - (M) Advanced Broadcast Journalism III;
 - (N) Advanced Journalism: Newspaper III;
 - (O) Advanced Journalism: Yearbook III;
 - (P) a comparable Advanced Placement (AP) English language arts course that does not count toward another credit required for graduation;
 - (Q) a comparable International Baccalaureate (IB) English language arts course that meets all the requirements in §110.34 of this title (relating to English Language Arts and Reading, English IV (One Credit), Beginning with School Year 2009-2010);
 - (R) after the successful completion of English I, II, and III, a locally developed English language arts course or other activity, including an apprenticeship or training hours needed to obtain an industry-recognized credential or certificate that is developed pursuant to the Texas Education Code (TEC), §28.002(g-1);
 - (S) Business English; and
 - (T) a college preparatory English language arts course that is developed pursuant to the TEC, §28.014.
- (2) Mathematics--three credits. Two of the credits must consist of Algebra I and Geometry.
- (A) The additional credit may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements, from the following courses or a credit selected from the courses listed in subparagraph (B) of this paragraph:
 - (i) Mathematical Models with Applications;
 - (ii) Mathematical Applications in Agriculture, Food, and Natural Resources;
 - (iii) Digital Electronics;
 - (iv) Robotics Programming and Design;
 - (v) Financial Mathematics;
 - (vi) Applied Mathematics for Technical Professionals;
 - (vii) Accounting II;
 - (viii) Manufacturing Engineering Technology II; and
 - (ix) Robotics II.

- (B) The additional credit may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements, from the following courses:
- (i) Algebra II;
 - (ii) Precalculus;
 - (iii) Advanced Quantitative Reasoning;
 - (iv) Independent Study in Mathematics;
 - (v) Discrete Mathematics for Problem Solving;
 - (vi) Algebraic Reasoning;
 - (vii) Statistics;
 - (viii) a comparable AP mathematics course that does not count toward another credit required for graduation;
 - (ix) AP Computer Science A;
 - (x) IB Computer Science Higher Level;
 - (xi) Engineering Mathematics;
 - (xii) Statistics and Business Decision Making;
 - (xiii) Mathematics for Medical Professionals;
 - (xiv) Discrete Mathematics for Computer Science;
 - (xv) pursuant to the TEC, §28.025(b-5), after the successful completion of Algebra II, a mathematics course endorsed by an institution of higher education as a course for which the institution would award course credit or as a prerequisite for a course for which the institution would award course credit. The Texas Education Agency (TEA) shall maintain a current list of courses offered under this clause; and
 - (xvi) after the successful completion of Algebra I and Geometry, a locally developed mathematics course or other activity, including an apprenticeship or training hours needed to obtain an industry-recognized credential or certificate that is developed pursuant to the TEC, §28.002(g-1).
- (C) One credit of a two-credit IB mathematics course selected from Chapter 111 of this title (relating to Texas Essential Knowledge and Skills for Mathematics) may satisfy the additional mathematics credit.
- (3) Science--three credits. One credit must consist of Biology or a comparable AP or IB biology course.
- (A) One credit must be selected from the following laboratory-based courses:
- (i) Integrated Physics and Chemistry;
 - (ii) Chemistry;
 - (iii) Physics;
 - (iv) Principles of Technology; and
 - (v) a comparable AP or IB chemistry or physics course that does not count toward another credit required for graduation.
- (B) The additional credit may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements, from the following laboratory-based courses:

- (i) Chemistry;
 - (ii) Physics;
 - (iii) Aquatic Science;
 - (iv) Astronomy;
 - (v) Earth Systems ~~[and Space]~~ Science;
 - (vi) Environmental Systems;
 - (vii) Specialized Topics in Science:
 - (viii) [~~(vii)~~] a comparable AP science course that does not count toward another credit required for graduation;
 - (ix) [~~(viii)~~] Advanced Animal Science;
 - (x) [~~(ix)~~] Advanced Plant and Soil Science;
 - (xi) [~~(x)~~] Anatomy and Physiology;
 - (xii) [~~(xi)~~] Medical Microbiology;
 - (xiii) [~~(xii)~~] Pathophysiology;
 - (xiv) [~~(xiii)~~] Food Science;
 - (xv) [~~(xiv)~~] Forensic Science;
 - (xvi) [~~(xv)~~] Biotechnology I;
 - (xvii) [~~(xvi)~~] Biotechnology II;
 - (xviii) [~~(xvii)~~] Principles of Technology;
 - (xix) [~~(xviii)~~] Scientific Research and Design;
 - (xx) [~~(xix)~~] Engineering Design and Problem Solving;
 - (xxi) [~~(xx)~~] Engineering Science;
 - (xxii) [~~(xxi)~~] pursuant to the TEC, §28.025(b-5), after the successful completion of physics, a science course endorsed by an institution of higher education as a course for which the institution would award course credit or as a prerequisite for a course for which the institution would award course credit. The TEA shall maintain a current list of courses offered under this clause;
 - (xxiii) [~~(xxii)~~] a locally developed science course or other activity, including an apprenticeship or training hours needed to obtain an industry-recognized credential or certificate that is developed pursuant to the TEC, §28.002(g-1); and
 - (xxiv) [~~(xxiii)~~] one credit of a two-credit IB science course selected from Chapter 112 of this title (relating to Texas Essential Knowledge and Skills for Science).
- (C) Credit may not be earned for both physics and Principles of Technology to satisfy science credit requirements.
- (4) Social studies--three credits. [Two of the credits must consist of United States History Studies Since 1877 (one credit), United States Government (one half credit), and Economics with Emphasis on the Free Enterprise System and Its Benefits (one half credit). The additional credit may be selected from the following courses:]
- (A) One credit must consist of United States History Studies Since 1877.
 - (B) One-half credit must consist of United States Government.
 - (C) One-half credit must be selected from the following:

- (i) Economics with Emphasis on the Free Enterprise System and Its Benefits; or
 - (ii) Personal Financial Literacy/Economics.
 - (D) One credit must be selected from the following:
 - (i) [~~A~~] World History Studies; [~~or~~]
 - (ii) [~~B~~] World Geography Studies; or
 - (iii) [~~C~~] a comparable AP or IB world history or world geography course that does not count toward another credit required for graduation.
- (5) Languages other than English (LOTE)--two credits.
- (A) The credits may be selected from the following:
 - (i) any two levels in the same language, including comparable AP or IB language courses that do not count toward another credit required for graduation; or
 - (ii) two credits in computer programming languages, including computer coding, to be selected from Computer Science I, II, and III, AP Computer Science Principles, AP Computer Science A, IB Computer Science Standard Level, and IB Computer Science Higher Level.
 - (B) A single two-credit IB LOTE course may only satisfy one LOTE requirement.
 - (C) If a student, in completing the first credit of LOTE, demonstrates that the student is unlikely to be able to complete the second credit, the student may substitute another appropriate course as follows:
 - (i) Special Topics in Language and Culture;
 - (ii) World History Studies or World Geography Studies for a student who is not required to complete both by the local district;
 - (iii) another credit selected from Chapter 114 of this title (relating to Texas Essential Knowledge and Skills for Languages Other Than English); or
 - (iv) computer programming languages, including computer coding.
 - (D) The determination regarding a student's ability to complete the second credit of LOTE must be agreed to by:
 - (i) the teacher of the first LOTE credit course or another LOTE teacher designated by the school district, the principal or designee, and the student's parent or person standing in parental relation;
 - (ii) the student's admission, review, and dismissal (ARD) committee if the student receives special education services under the TEC, Chapter 29, Subchapter A; or
 - (iii) the committee established for the student under Section 504, Rehabilitation Act of 1973 (29 United States Code, Section 794) if the student does not receive special education services under the TEC, Chapter 29, Subchapter A, but is covered by the Rehabilitation Act of 1973.
 - (E) A student, who due to a disability, is unable to complete two credits in the same language in a language other than English, may substitute a combination of two credits that are not being used to satisfy another specific graduation requirement selected from English language arts, mathematics, science, or social studies or two credits in career and technical education [~~or technology applications~~] for the LOTE credit requirements. The determination regarding a student's ability to complete the LOTE credit requirements will be made by:
 - (i) the student's ARD committee if the student receives special education services under the TEC, Chapter 29, Subchapter A; or

- (ii) the committee established for the student under Section 504, Rehabilitation Act of 1973 (29 United States Code, Section 794) if the student does not receive special education services under the TEC, Chapter 29, Subchapter A, but is covered by the Rehabilitation Act of 1973.
- (F) A student who successfully completes a dual language immersion/two-way or dual language immersion/one-way program in accordance with §89.1210(d)(3) and (4) of this title (relating to Program Content and Design), §89.1227 of this title (relating to Minimum Requirements for Dual Language Immersion Program Model), and §89.1228 of this title (relating to Two-Way Dual Language Immersion Program Model Implementation) at an elementary school may satisfy one credit of the two credits required in a language other than English.
- (i) To successfully complete a dual language immersion program, a student must:
 - (I) have participated in a dual language immersion program for at least five consecutive school years;
 - (II) achieve high levels of academic competence as demonstrated by performance of meets or masters grade level on both the mathematics and reading State of Texas Assessments of Academic Readiness (STAAR®) in English or Spanish, as applicable, in at least one grade level; and
 - (III) achieve proficiency in both English and a language other than English as demonstrated by scores of proficient or higher in the reading and speaking domains on language proficiency or achievement tests in both languages.
 - (ii) The second credit of a language other than English must be in the same language as the successfully completed dual language immersion program.
- (G) A student who successfully completes a course in American Sign Language while in elementary school may satisfy one credit of the two credits required in a language other than English.
- (6) Physical education--one credit.
- (A) The required credit may be selected from any combination of the following one-half to one credit courses:
 - (i) Lifetime Fitness and Wellness Pursuits;
 - (ii) Lifetime Recreation and Outdoor Pursuits; and
 - (iii) Skill-Based Lifetime Activities.
 - ~~[(i) — Foundations of Personal Fitness;]~~
 - ~~[(ii) — Adventure/Outdoor Education;]~~
 - ~~[(iii) — Aerobic Activities; and]~~
 - ~~[(iv) — Team or Individual Sports.]~~
 - (B) In accordance with local district policy, the required credit may be earned through completion of any Texas essential knowledge and skills-based course that meets the requirement in subparagraph (E) of this paragraph for 100 minutes of moderate to vigorous physical activity per five-day school week and that is not being used to satisfy another specific graduation requirement.
 - (C) In accordance with local district policy, credit for any of the courses listed in subparagraph (A) of this paragraph may be earned through participation in the following activities:

- (i) Athletics;
 - (ii) Junior Reserve Officer Training Corps (JROTC); and
 - (iii) appropriate private or commercially sponsored physical activity programs conducted on or off campus. The district must apply to the commissioner of education for approval of such programs, which may be substituted for state graduation credit in physical education. Such approval may be granted under the following conditions.
 - (I) Olympic-level participation and/or competition includes a minimum of 15 hours per week of highly intensive, professional, supervised training. The training facility, instructors, and the activities involved in the program must be certified by the superintendent to be of exceptional quality. Students qualifying and participating at this level may be dismissed from school one hour per day. Students dismissed may not miss any class other than physical education.
 - (II) Private or commercially sponsored physical activities include those certified by the superintendent to be of high quality and well supervised by appropriately trained instructors. Student participation of at least five hours per week must be required. Students certified to participate at this level may not be dismissed from any part of the regular school day.
- (D) In accordance with local district policy, up to one credit for any one of the courses listed in subparagraph (A) of this paragraph may be earned through participation in any of the following activities:
- (i) Drill Team;
 - (ii) Marching Band; and
 - (iii) Cheerleading.
- (E) All substitution activities allowed in subparagraphs (B)-(D) of this paragraph must include at least 100 minutes per five-day school week of moderate to vigorous physical activity.
- (F) Credit may not be earned more than once for any course identified in subparagraph (A) of this paragraph. No more than four substitution credits may be earned through any combination of substitutions allowed in subparagraphs (B)-(D) of this paragraph.
- (G) A student who is unable to participate in physical activity due to disability or illness may substitute an academic elective credit (English language arts, mathematics, science, or social studies) or a course that is offered for credit as provided by the TEC, §28.002(g-1), for the physical education credit requirement. The determination regarding a student's ability to participate in physical activity will be made by:
- (i) the student's ARD committee if the student receives special education services under the TEC, Chapter 29, Subchapter A;
 - (ii) the committee established for the student under Section 504, Rehabilitation Act of 1973 (29 United States Code, Section 794) if the student does not receive special education services under the TEC, Chapter 29, Subchapter A, but is covered by the Rehabilitation Act of 1973; or
 - (iii) a committee established by the school district of persons with appropriate knowledge regarding the student if each of the committees described by clauses (i) and (ii) of this subparagraph is inapplicable. This committee shall follow the same procedures required of an ARD or a Section 504 committee.
- (7) Fine arts--one credit.

- (A) The credit may be selected from the following courses subject to prerequisite requirements:
 - (i) Art, Level I, II, III, or IV;
 - (ii) Dance, Level I, II, III, or IV;
 - (iii) Music, Level I, II, III, or IV;
 - (iv) Music Studies;
 - (v) Theatre, Level I, II, III, or IV;
 - (vi) Musical Theatre, Level I, II, III, or IV;
 - (vii) Technical Theatre, Level I, II, III, or IV;
 - (viii) IB Film Standard or Higher Level;
 - (ix) Floral Design;
 - (x) Digital Art and Animation; and
 - (xi) 3-D Modeling and Animation.
- (B) In accordance with local district policy, credit may be earned through participation in a community-based fine arts program not provided by the school district in which the student is enrolled. The district must apply to the commissioner of education for approval of such programs, which may be substituted for state graduation credit in fine arts. Approval may be granted if the fine arts program provides instruction in the essential knowledge and skills identified for a fine arts course as defined by Chapter 117, Subchapter C, of this title (relating to High School, Adopted 2013).
- (c) Elective courses--five credits. The credits must be selected from the list of courses specified in §74.11(g) or (h) of this title (relating to High School Graduation Requirements) or from a locally developed course or activity developed pursuant to the TEC, §28.002(g-1), for which a student may receive credit and that does not satisfy a specific course requirement.
- (d) Substitutions. No substitutions are allowed in the Foundation High School Program, except as specified in this chapter.

§74.13. Endorsements.

- (a) A student shall specify in writing an endorsement the student intends to earn upon entering Grade 9.
- (b) A district shall permit a student to enroll in courses under more than one endorsement before the student's junior year and to choose, at any time, to earn an endorsement other than the endorsement the student previously indicated. This section does not entitle a student to remain enrolled to earn more than 26 credits.
- (c) A student must earn at least 26 credits to earn an endorsement.
- (d) A school district may define advanced courses and determine a coherent sequence of courses for an endorsement area, provided that prerequisites in Chapters 110-117, 127, and 130 of this title are followed.
- (e) To earn an endorsement a student must demonstrate proficiency in the following.
 - (1) The curriculum requirements for the Foundation High School Program as defined by §74.12 of this title (relating to Foundation High School Program).
 - (2) A fourth credit in mathematics that may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements, from the following courses:
 - (A) Algebra II;
 - (B) Precalculus;

- (C) Advanced Quantitative Reasoning;
 - (D) Independent Study in Mathematics;
 - (E) Discrete Mathematics for Problem Solving;
 - (F) Algebraic Reasoning;
 - (G) Statistics;
 - (H) a comparable Advanced Placement (AP) mathematics course that does not count toward another credit required for graduation;
 - (I) AP Computer Science A;
 - (J) International Baccalaureate (IB) Computer Science Higher Level;
 - (K) Engineering Mathematics;
 - (L) Statistics and Business Decision Making;
 - (M) Mathematics for Medical Professionals;
 - (N) Discrete Mathematics for Computer Science;
 - (O) pursuant to the Texas Education Code (TEC), §28.025(b-5), after the successful completion of Algebra II, a mathematics course endorsed by an institution of higher education as a course for which the institution would award course credit or as a prerequisite for a course for which the institution would award course credit. The Texas Education Agency (TEA) shall maintain a current list of courses offered under this subparagraph; and
 - (P) after the successful completion of Algebra I and Geometry, a locally developed mathematics course or other activity, including an apprenticeship or training hours needed to obtain an industry-recognized credential or certificate that is developed pursuant to the TEC, §28.002(g-1).
- (3) A student may complete a course listed in paragraph (2) of this subsection before or after completing a course listed in §74.12(b)(2)(A) of this title.
 - (4) The fourth mathematics credit may be a college preparatory mathematics course that is developed and offered pursuant to the TEC, §28.014.
 - (5) The fourth mathematics credit may be satisfied with one credit of a two-credit IB mathematics course selected from Chapter 111 of this title (relating to Texas Essential Knowledge and Skills for Mathematics) that does not count toward another credit required for graduation.
 - (6) An additional credit in science that may be selected from one full credit or a combination of two half credits from two different courses, subject to prerequisite requirements, from the following courses:
 - (A) Chemistry;
 - (B) Physics;
 - (C) Aquatic Science;
 - (D) Astronomy;
 - (E) Earth Systems ~~[and Space]~~ Science;
 - (F) Environmental Systems;
 - (G) Specialized Topics in Science;
 - ~~(H) [(G)]~~ a comparable AP science course that does not count toward another credit required for graduation;

- (I) ~~(H)~~ Advanced Animal Science;
- (J) ~~(G)~~ Advanced Plant and Soil Science;
- (K) ~~(F)~~ Anatomy and Physiology;
- (L) ~~(E)~~ Medical Microbiology;
- (M) ~~(D)~~ Pathophysiology;
- (N) ~~(C)~~ Food Science;
- (O) ~~(B)~~ Forensic Science;
- (P) ~~(A)~~ Biotechnology I;
- (Q) ~~(Z)~~ Biotechnology II;
- (R) ~~(Y)~~ Principles of Technology;
- (S) ~~(X)~~ Scientific Research and Design;
- (T) ~~(W)~~ Engineering Design and Problem Solving;
- (U) ~~(V)~~ Engineering Science;
- (V) ~~(U)~~ pursuant to the TEC, §28.025(b-5), after the successful completion of physics, a science course endorsed by an institution of higher education as a course for which the institution would award course credit or as a prerequisite for a course for which the institution would award course credit. The TEA shall maintain a current list of courses offered under this subparagraph;
- (W) ~~(T)~~ a locally developed science course or other activity, including an apprenticeship or training hours needed to obtain an industry-recognized credential or certificate that is developed pursuant to the TEC, §28.002(g-1);
- (X) ~~(S)~~ pursuant to the TEC, §28.025(c-3), a student pursuing an arts and humanities endorsement who has the written permission of the student's parent or a person standing in parental relation to the student may substitute a course that is not being used to satisfy another specific graduation requirement selected from:
 - (i) Chapter 110 of this title (relating to Texas Essential Knowledge and Skills for English Language Arts and Reading);
 - (ii) Chapter 113 of this title (relating to Texas Essential Knowledge and Skills for Social Studies);
 - (iii) Chapter 114 of this title (relating to Texas Essential Knowledge and Skills for Languages Other Than English); or
 - (iv) Chapter 117 of this title (relating to Texas Essential Knowledge and Skills for Fine Arts); and
- (Y) ~~(R)~~ credit may not be earned for both physics and Principles of Technology to satisfy science credit requirements.
- (Z) ~~(Q)~~ The fourth science credit may be satisfied with one credit of a two-credit IB science course selected from Chapter 112 of this title (relating to Texas Essential Knowledge and Skills for Science) that does not count toward another credit required for graduation.

(7) Two additional elective credits that may be selected from the list of courses specified in §74.11(g) or (h) of this title (relating to High School Graduation Requirements).

(f) A student may earn any of the following endorsements.

- (1) Science, technology, engineering, and mathematics (STEM). A student may earn a STEM endorsement by completing the requirements specified in subsection (e) of this section, including Algebra II, chemistry, and physics or Principles of Technology and:
- (A) a coherent sequence of courses for four or more credits in career and technical education (CTE) that consists of at least two courses in the same career cluster and at least one advanced CTE course. The courses may be selected from Chapter 130 of this title (relating to Texas Essential Knowledge and Skills for Career and Technical Education), Chapter 127 of this title (relating to Texas Essential Knowledge and Skills for Career Development and Career and Technical Education), or CTE innovative courses approved by the commissioner of education. The final course in the sequence must be selected from Chapter ~~127~~ [130], Subchapter O, of this title (relating to Science, Technology, Engineering, and Mathematics) or Career Preparation I or II and Project-Based Research in Chapter 127, Subchapter B, of this title (relating to High School), if the course addresses a STEM-related field; or
 - (B) courses required to complete a TEA-designated program of study related to STEM; or
 - (C) three credits in mathematics by successfully completing Algebra II and two additional mathematics courses for which Algebra II is a prerequisite by selecting courses from subsection (e)(2) of this section; or
 - (D) four credits in science by successfully completing chemistry, physics, and two additional science courses by selecting courses from subsection (e)(6) of this section; or
 - (E) in addition to Algebra II, chemistry, and physics, a coherent sequence of three additional credits from no more than two of the categories or disciplines represented by subparagraphs (A), (B), (C), and (D) of this paragraph.
- (2) Business and industry. A student may earn a business and industry endorsement by completing the requirements specified in subsection (e) of this section and:
- (A) a coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. The courses may be selected from Chapter 130 of this title, Chapter 127 of this title, or CTE innovative courses approved by the commissioner. The final course in the sequence must be selected from one of the following:
 - (i) Chapter 130, Subchapter A, of this title (relating to Agriculture, Food, and Natural Resources); or
 - (ii) Chapter 130, Subchapter B, of this title (relating to Architecture and Construction); or
 - (iii) Chapter 130, Subchapter C, of this title (relating to Arts, Audio/Video Technology, and Communications); or
 - (iv) Chapter 130, Subchapter D, of this title (relating to Business Management and Administration); or
 - (v) Chapter 130, Subchapter F, of this title (relating to Finance); or
 - (vi) Chapter 127, Subchapter J, of this title (relating to Hospitality and Tourism); or
 - ~~(vi) Chapter 130, Subchapter I, of this title (relating to Hospitality and Tourism); or~~
 - (vii) Chapter 130, Subchapter K, of this title (relating to Information Technology); or
 - (viii) Chapter 130, Subchapter M, of this title (relating to Manufacturing); or
 - (ix) Chapter 130, Subchapter N, of this title (relating to Marketing); or
 - (x) Chapter 130, Subchapter P, of this title (relating to Transportation, Distribution, and Logistics); or

- (xi) Chapter 130, Subchapter Q, of this title (relating to Energy); or
 - (xii) Career Preparation I or II and Project-Based Research in Chapter 127, Subchapter B, of this title if the course addresses a career from a field listed in clauses (i)-(xi) of this subparagraph; or
- (B) courses required to complete a TEA-designated program of study related to business and industry; or
- (C) four English credits by selecting courses from Chapter 110 of this title to include three levels in one of the following areas:
- (i) public speaking; or
 - (ii) debate; or
 - (iii) advanced broadcast journalism; or
 - (iv) advanced journalism: newspaper; or
 - (v) advanced journalism: yearbook; or
 - (vi) advanced journalism: literary magazine; or
- (D) a coherent sequence of four credits from subparagraph (A), (B), or (C) of this paragraph.
- (3) Public services. A student may earn a public services endorsement by completing the requirements specified in subsection (e) of this section and:
- (A) a coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. The courses may be selected from Chapter 130 of this title, Chapter 127 of this title, or CTE innovative courses approved by the commissioner. The final course in the sequence must be selected from one of the following:
- (i) Chapter 127, Subchapter G, of this title (relating to Education and Training); or
 - ~~[(i) Chapter 130, Subchapter E, of this title (relating to Education and Training); or]~~
 - (ii) Chapter 130, Subchapter G, of this title (relating to Government and Public Administration); or
 - (iii) Chapter 127, Subchapter I, of this title (relating to Health Science); or
 - ~~[(iii) Chapter 130, Subchapter H, of this title (relating to Health Science); or]~~
 - (iv) Chapter 130, Subchapter J, of this title (relating to Human Services); or
 - (v) Chapter 127, Subchapter M, of this title (relating to Law and Public Service); or
 - ~~[(v) Chapter 130, Subchapter L, of this title (relating to Law, Public Safety, Corrections, and Security); or]~~
 - (vi) Career Preparation I or II and Project-Based Research in Chapter 127, Subchapter B, of this title if the course addresses a field from a cluster listed in clauses (i)-(v) of this subparagraph; or
- (B) courses required to complete a TEA-designated program of study related to public services; or
- (C) four courses in Junior Reserve Officer Training Corps (JROTC).
- (4) Arts and humanities. A student may earn an arts and humanities endorsement by completing the requirements specified in subsection (e) of this section and:
- (A) five social studies credits by selecting courses from Chapter 113 of this title; or

- (B) four levels of the same language in a language other than English by selecting courses in accordance with Chapter 114 of this title, which may include Advanced Language for Career Applications; or
- (C) two levels of the same language in a language other than English and two levels of a different language in a language other than English by selecting courses in accordance with Chapter 114 of this title; or
- (D) four levels of American sign language by selecting courses in accordance with Chapter 114 of this title; or
- (E) a coherent sequence of four credits by selecting courses from one or two categories or disciplines in fine arts from Chapter 117 of this title or innovative courses approved by the commissioner; or
- (F) four English credits by selecting from the following:
 - (i) English IV; or
 - (ii) Independent Study in English; or
 - (iii) Literary Genres; or
 - (iv) Creative Writing; or
 - (v) Research and Technical Writing; or
 - (vi) Humanities; or
 - (vii) Communication Applications; or
 - (viii) AP English Literature and Composition; or
 - (ix) AP English Language and Composition; or
 - (x) IB Language Studies A: Language and Literature Standard Level; or
 - (xi) IB Language Studies A: Language and Literature Higher Level; or
 - (xii) IB Language Studies A: Literature Standard Level; or
 - (xiii) IB Language Studies A: Literature Higher Level; or
 - (xiv) IB Literature and Performance Standard Level.
- (5) Multidisciplinary studies. A student may earn a multidisciplinary studies endorsement by completing the requirements specified in subsection (e) of this section and:
 - (A) four advanced courses that prepare a student to enter the workforce successfully or postsecondary education without remediation from within one endorsement area or among endorsement areas that are not in a coherent sequence; or
 - (B) four credits in each of the four foundation subject areas to include chemistry and/or physics and English IV or a comparable AP or IB English course; or
 - (C) four credits in Advanced Placement, International Baccalaureate, or dual credit selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts.
- (g) A course completed as part of the set of four courses needed to satisfy an endorsement requirement may also satisfy a requirement under §74.12(b) and (c) of this title and subsection (e)(2), (4), (5), and (6) of this section, including an elective requirement. The same course may count as part of the set of four courses for more than one endorsement.

§74.14. Performance Acknowledgments.

- (a) A student may earn a performance acknowledgment on the student's transcript for outstanding performance in a dual credit course by successfully completing:
 - (1) at least 12 hours of college academic courses, including those taken for dual credit as part of the Texas core curriculum, and advanced technical credit courses, including locally articulated courses, with a grade of the equivalent of 3.0 or higher on a scale of 4.0; or
 - (2) an associate degree while in high school.
- (b) A student may earn a performance acknowledgment on the student's transcript for outstanding performance in bilingualism and biliteracy as follows:
 - (1) A student may earn a performance acknowledgment by demonstrating proficiency in accordance with local school district grading policy in two or more languages by:
 - (A) completing all English language arts requirements and maintaining a minimum grade point average (GPA) of the equivalent of 80 on a scale of 100; and
 - (B) satisfying one of the following:
 - (i) completion of a minimum of three credits in the same language in a language other than English with a minimum GPA of the equivalent of 80 on a scale of 100; or
 - (ii) demonstrated proficiency in the Texas Essential Knowledge and Skills for Level IV or higher in a language other than English with a minimum GPA of the equivalent of 80 on a scale of 100; or
 - (iii) completion of at least three credits in foundation subject area courses in a language other than English with a minimum GPA of 80 on a scale of 100; or
 - (iv) demonstrated proficiency in one or more languages other than English through one of the following methods:
 - (I) a score of 3 or higher on a College Board Advanced Placement examination for a language other than English; or
 - (II) a score of 4 or higher on an International Baccalaureate examination for a higher-level languages other than English course; or
 - (III) performance on a national assessment of language proficiency in a language other than English of at least Intermediate High or its equivalent.
 - (2) In addition to meeting the requirements of paragraph (1) of this subsection, to earn a performance acknowledgment in bilingualism and biliteracy, an English language learner must also have:
 - (A) participated in and met the exit criteria for a bilingual or English as a second language (ESL) program; and
 - (B) scored at the Advanced High level on the Texas English Language Proficiency Assessment System (TELPAS).
- (c) A student may earn a performance acknowledgment on the student's transcript for outstanding performance on a College Board Advanced Placement test or International Baccalaureate examination by earning:
 - (1) a score of 3 or above on a College Board Advanced Placement examination; or
 - (2) a score of 4 or above on an International Baccalaureate examination.
- (d) A student may earn a performance acknowledgment on the student's transcript for outstanding performance on an established, valid, reliable, and nationally norm-referenced preliminary college preparation assessment instrument used to measure a student's progress toward readiness for college and the workplace

or on an established valid, reliable, and nationally norm-referenced assessment instrument used by colleges and universities as part of their undergraduate admissions process by:

- (1) earning a score on the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT®) that qualifies the student for recognition as a commended scholar or higher by the College Board and National Merit Scholarship Corporation, as part of the National Hispanic Recognition Program (NHRP) of the College Board or as part of the National Achievement Scholarship Program of the National Merit Scholarship Corporation;
 - (2) achieving the ACT® readiness benchmark score on at least three of the five subject tests on the ACT Aspire™ examination;
 - (3) earning a total score of at least 1310 on the SAT®; or
 - (4) earning a composite score on the ACT® examination of 28 (excluding the writing subscore).
- (e) A student may earn a performance acknowledgment on the student's transcript for earning a state-recognized or nationally or internationally recognized business or industry certification or license as follows.
- (1) A student may earn a performance acknowledgment with:
 - (A) performance on an examination or series of examinations sufficient to obtain a nationally or internationally recognized business or industry certification; or
 - (B) performance on an examination sufficient to obtain a government-required credential to practice a profession.
 - (2) Nationally or internationally recognized business or industry certification shall be defined as an industry-validated credential that complies with knowledge and skills standards promulgated by a nationally or internationally recognized business, industry, professional, or government entity representing a particular profession or occupation that is issued by or endorsed by:
 - (A) a national or international business, industry, or professional organization;
 - (B) a state agency or other government entity; or
 - (C) a state-based industry association.
 - (3) Certifications or licensures for performance acknowledgements shall:
 - (A) be age appropriate for high school students;
 - (B) represent a student's substantial course of study and/or end-of-program knowledge and skills;
 - (C) include an industry-recognized examination or series of examinations, an industry-validated skill test, or demonstrated proficiency through documented, supervised field experience; and
 - (D) represent substantial knowledge and multiple skills needed for successful entry into a high-skill occupation.

Update on Texas Essential Knowledge and Skills (TEKS) Review

November 19, 2021

COMMITTEE OF THE FULL BOARD: ACTION STATE BOARD OF EDUCATION: ACTION

SUMMARY: This item provides the opportunity for staff to present an update on the review of the Texas Essential Knowledge and Skills (TEKS) and the English Language Proficiency Standards (ELPS) and for the board to provide additional guidance to TEKS and ELPS review work groups, as necessary.

STATUTORY AUTHORITY: Texas Education Code (TEC), §§7.102(c)(4); 28.002(a) and (c); and 28.025(a).

TEC, §7.102(c)(4), requires the State Board of Education (SBOE) to establish curriculum and graduation requirements.

TEC, §28.002(a), identifies the subjects of the required curriculum.

TEC, §28.002(c), requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments.

TEC, §28.025(a), requires the SBOE to by rule determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under the TEC, §28.002.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: The SBOE adopted the TEKS for all subjects effective September 1, 1998. The English language arts and reading TEKS were amended effective September 4, 2008. The Spanish language arts and reading TEKS were amended effective November 26, 2008. The TEKS for high school English elective courses were amended effective August 23, 2010. The English and Spanish language arts and reading TEKS for Kindergarten-Grade 8 were amended effective September 25, 2017, and the English language arts and reading and English as a second language (ESL) TEKS for high school were amended effective November 12, 2017. The K-12 TEKS for English and Spanish language arts and reading were again amended effective August 1, 2019, to make technical adjustments to the standards. The mathematics TEKS were amended effective August 1, 2006. The secondary mathematics TEKS were amended effective February 22, 2009. The mathematics TEKS were again amended effective September 12, 2012. The science TEKS were amended effective August 4, 2009 and were amended again to streamline the science TEKS effective August 27, 2018. The social studies TEKS were amended effective August 23, 2010 and were amended again to streamline the social studies TEKS in 2018. The career and technical education (CTE) TEKS were amended effective August 23, 2010. The CTE TEKS were again amended effective August 28, 2017. The fine arts TEKS were amended effective August 24, 2015. The TEKS for languages other than English (LOTE) were amended effective July 15, 2014, and December 31, 2014. The technology applications TEKS were amended effective September 26, 2011. At the November 2020 meeting, the board gave final approval to the health education TEKS and the physical education TEKS, which are scheduled to be effective August 1, 2022. The board also gave final approval in November 2020 to TEKS for four high school science courses to be implemented beginning with the 2023-2024 school year. At the June 2021 meeting, the SBOE gave final approval to TEKS for five additional high school science courses.

At the June 2019 SBOE meeting, the board held a work session to discuss updating the TEKS and instructional materials review and adoption schedule. At the September 2019 meeting, the board approved the schedule through the 2030-2031 school year. The board held another work session to discuss updates to the TEKS and instructional materials review and adoption schedule at the January 2021 meeting. The board approved updates to the TEKS and instructional materials review and adoption schedule at the April 2021 meeting.

BACKGROUND INFORMATION AND JUSTIFICATION: The board received training from a standards writing advisor at the July 2014 meeting. The standards writing advisor provided additional training to Texas Education Agency (TEA) staff in October 2014 to support future facilitation of the TEKS review committees.

In 2017, the SBOE significantly revised the process for the review and revision of the TEKS. The 2017 TEKS review process was used for the streamlining of the social studies TEKS. At the November 2018 meeting, the SBOE approved updates to the 2017 TEKS review and revision process to better clarify the process. The updated process was used for the review of the physical education, health education, and science TEKS.

The SBOE began the review of the English Language Proficiency Standards (ELPS) in early 2019, in accordance with the SBOE's approved TEKS and instructional materials review schedule. Applications to serve on ELPS review work groups were posted on the TEA website in December 2018. Also in December 2018, TEA distributed a survey to collect information from educators regarding the review and revision of the ELPS.

In preparation for the review of the science TEKS, SBOE members were asked at the September 2019 meeting to designate science content advisors. Applications to serve on the science TEKS review work groups were posted on the TEA website in November 2019, and in December 2019, TEA distributed a survey to collect information from educators regarding the review and revision of the science TEKS. TEA staff provided applications for approval by SBOE members in January, February, March, May, July, October, and December 2020. At the November 2020 meeting, the board gave final approval to revised TEKS for four high school science courses: Biology, Chemistry, Integrated Physics and Chemistry, and Physics. At the June 2021 meeting, the board gave final approval to revised TEKS for additional high school courses, which include Aquatic Science, Astronomy, Earth Systems Science, Environmental Science, and Specialized Topics in Science. Second reading and final adoption of new TEKS for Kindergarten-Grade 8 science are included as a separate item on this agenda.

At the January 2021 meeting, the board held a work session to discuss the timeline for the TEKS review and revision process and associated activities, including updates to State Board for Educator Certification teacher assignment rules and certification exams, adoption of instructional materials, and the completion of the Texas Resource Review. TEA provided an overview of career and technical education (CTE) programs of study and a skills gap analysis that is being completed to inform review and revision of the CTE TEKS. The board discussed potential adjustments to the TEKS and Instructional Materials Review and Adoption Schedule.

Also, during the work session, staff provided an update on plans for the review and revision of CTE courses that satisfy a science graduation requirement as well as certain courses in the health science, education and training, and science, technology, engineering, and mathematics (STEM) programs of study. Applications to serve on these CTE TEKS review work groups were posted on the TEA website in December 2020. TEA staff provided SBOE members applications for approval to serve on a CTE work group at the January 2021 SBOE meeting. Additional applications were provided to SBOE members in February and March 2021. Work groups were convened to develop recommendations for the CTE courses in March, April, May, June, and August 2021. Second reading and final adoption of new TEKS for CTE

courses that satisfy a science graduation requirement as well as certain courses in the health science, education and training, and science, technology, engineering, and mathematics (STEM) programs of study are included as a separate item on this agenda.

In May 2021, the board nominated individuals to serve as content advisors for the review of the TEKS for technology applications. An application to serve on technology applications TEKS review work groups was posted on the TEA website in April 2021. TEA staff provided SBOE members applications for approval to serve on the technology applications work groups in May, June, and August 2021. Work groups were convened in July, September, October, and November 2021.

At the June 2021 SBOE meeting, the board discussed the upcoming review of the social studies TEKS. Board members designated content advisors for the social studies TEKS review in August 2021. An application to serve on social studies TEKS review work groups was posted on the TEA website in September 2021. Additionally, in September 2021, a survey was posted on the TEA website to ask for feedback on the current TEKS for social studies. TEA staff provided SBOE members applications for approval to serve on the social studies work groups in September and October 2021.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Discussion of Pending Litigation

November 17, 2021

COMMITTEE OF THE FULL BOARD: DISCUSSION STATE BOARD OF EDUCATION: NO ACTION

SUMMARY: The State Board of Education (SBOE) may enter into executive session in accordance with the Texas Government Code, §551.071(1)(A), to discuss pending and contemplated litigation with the general counsel, legal staff, and, if necessary, attorney(s) from the Attorney General's Office. The Committee of the Full Board will meet in Room 1-103 to discuss this item.

Cases to be discussed may include:

Tribune Company, No. 08-13141; *The Official Committee of Unsecured Creditors of Tribune Company v. Fitzsimmons*, Adv. Pro. No. 10-54010 (Bankr. D. Del);

Deutsche Bank v Bank of America, No. 3:11-CV-01175-F (N. D. Tex., Dallas Div.) and *Deutsche Bank v. Employees Retirement Fund of the City of Dallas*, No. 3:11-CV-1167-F; (N. D. Tex. Dallas Div.) *CONSOLIDATED in: In re: Tribune Company Fraudulent Conveyance Litigation*; No. 11-MD-2296 *Consolidated Multidistrict Action (S.D.N.Y.)*;

Student v. Conroe ISD, Texas Education Agency and State Board of Education, No. 230-SE-0721 (Special Education Hearing Officer – State of Texas); and

any other litigation arising after the date of posting or reasonably contemplated as of the date of the board meeting.

BOARD RESPONSE: Board may advise and comment.

BACKGROUND INFORMATION AND JUSTIFICATION: At every regularly scheduled meeting, the SBOE has the opportunity to be apprised of pending litigation as the need arises. The SBOE may also receive continued briefing on procedural developments.

Staff Member Responsible:

Von Byer, General Counsel, Legal Services

COMMITTEE ON INSTRUCTION

Proposed Repeal of 19 TAC Chapter 74, Curriculum Requirements, Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002, and Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005
(First Reading and Filing Authorization)

November 19, 2021

COMMITTEE ON INSTRUCTION: ACTION
STATE BOARD OF EDUCATION: CONSENT

SUMMARY: This item presents for first reading and filing authorization the proposed repeal of 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements, Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002, and Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005. The proposed repeals would remove high school graduation requirements that are outdated and no longer necessary.

STATUTORY AUTHORITY: Texas Education Code (TEC), §7.102(c)(4) and §28.025.

TEC, §7.102(c)(4), requires the State Board of Education (SBOE) to establish curriculum and graduation requirements.

TEC, §28.025, requires the SBOE to determine by rule the curriculum requirements that are consistent with the required curriculum under the TEC, §28.002.

The full text of statutory citations can be found in the statutory authority section of this agenda.

EFFECTIVE DATE: The proposed effective date of the proposed repeals is 20 days after filing as adopted with the Texas Register. Under TEC, §7.102(f), the SBOE must approve the rule action at second reading and final adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2022-2023 school year. The earlier effective date will remove obsolete rules as soon as possible.

PREVIOUS BOARD ACTION: The SBOE adopted rules in Chapter 74, Subchapter D, effective September 1, 2001, and last amended the rules in 2006. The SBOE adopted rules in Chapter 74, Subchapter E, effective December 7, 2003, and last amended the rules in 2010.

BACKGROUND INFORMATION AND JUSTIFICATION: The rules in Chapter 74, Subchapter D, outline the graduation requirements for students who entered Grade 9 in the 2001-2002, 2002-2003, or 2003-2004 school years. Graduation requirements outlined in Chapter 74, Subchapter E, apply to students who entered Grade 9 in the 2004-2005, 2005-2006, or 2006-2007 school years. This item provides the opportunity for the board to repeal these rules as they are no longer needed.

The text of the proposed repeal of Chapter 74, Subchapters D and E, is not included as an attachment to this item due to the volume of rules; however, the rules are viewable on the Texas Education Agency (TEA) website at <https://tea.texas.gov/about-tea/laws-and-rules/texas-administrative-code/19-tac-chapter-74>.

The proposed repeal was not presented as a discussion item. The SBOE, however, may wish to consider this item for first reading and filing authorization as authorized under its operating procedures. Therefore,

this item is presented for consideration for first reading and filing authorization at this meeting. It is recommended the SBOE consider this item for first reading and filing authorization to ensure that obsolete graduation requirements are removed as soon as possible.

FISCAL IMPACT: TEA has determined that there are no additional costs to state or local government required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would repeal existing graduation requirements by removing Chapter 74, Subchapters D and E, since the rules are out of date and no longer necessary.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not create a new regulation; would not expand or limit an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: The proposal would remove rules that are out of date and no longer necessary. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins December 17, 2021, and ends at 5:00 p.m. on January 21, 2022. The SBOE will take registered oral and written comments on the proposal at the appropriate committee meeting in January 2022 in accordance with the SBOE board operating policies and procedures. A request for a public hearing on the proposal submitted under the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the *Texas Register* on December 17, 2021.

MOTION TO BE CONSIDERED: The State Board of Education:

Suspend the board operating procedures in accordance with §5.2(a) to allow consideration at first reading and filing authorization; and

Approve for first reading and filing authorization the proposed repeal of 19 TAC Chapter 74, Curriculum Requirements, Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002, and Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Adoption of Review of 19 TAC Chapter 74, Curriculum Requirements

November 19, 2021

COMMITTEE ON INSTRUCTION: ACTION STATE BOARD OF EDUCATION: CONSENT

SUMMARY: Texas Government Code (TGC), §2001.039, establishes a four-year rule review cycle for all state agency rules, including State Board of Education (SBOE) rules. This item presents the adoption of review of 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements. The rules being reviewed provide for curriculum requirements for school districts, outline graduation requirements, and include other provisions that relate to curriculum requirements.

STATUTORY AUTHORITY: Statutory authority for this action is the [TGC, §2001.039](#). The statutory authority for 19 TAC Chapter 74, Subchapters A-G, is Texas Education Code ([TEC](#)), [§§7.102; 25.007; 28.002](#), as amended by House Bill (HB) 3979 and HB 4509, 87th Texas Legislature, Regular Session, 2021; [28.0021; 28.0023; 28.008; 28.011](#), as amended by HB 2681, 87th Texas Legislature, Regular Session, 2021; [28.012; 28.014; 28.018; 28.023; 28.025](#), as amended by HB 1603 and Senate Bill (SB) 1063, 87th Texas Legislature, Regular Session, 2021; [28.0256](#), as amended by SB 369, 87th Texas Legislature, Regular Session, 2021; [28.053; 28.054; 29.907; 33.081](#), as amended by HB 2721, 87th Texas Legislature, Regular Session, 2021, and [38.003](#).

TGC, §2001.039, requires a state agency to review and consider for reoption each of its rules.

TEC, §7.102, identifies state and regional organization and governance and duties and establishes the authority of the SBOE to establish curriculum and graduation requirements, adopt rules to carry out the required curriculum, establish guidelines for credit by examination, adopt transcript forms and standards for purposes of reporting academic achievement, adopt guidelines for determining financial need for the Texas Advanced Placement Incentive Program, and approve a program for testing students for dyslexia and related disorders.

TEC, §25.007, requires the agency to assist the transition of students who are homeless or in substitute care from one school to another.

TEC, §28.002, as amended by HB 3979 and HB 4509, 87th Texas Legislature, Regular Session, 2021, identifies the subjects of the required curriculum and requires the SBOE by rule to identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and will be addressed on the state assessment instruments.

TEC, §28.0021, requires school districts and charter schools to offer an elective course in personal financial literacy that meets the requirements for a one-half elective credit.

TEC, §28.0023, requires that the SBOE by rule require school districts and open-enrollment charter schools to provide instruction in cardiopulmonary resuscitation (CPR) and for students to receive the CPR instruction at least once before graduation.

TEC, §28.008, requires the SBOE to incorporate the College and Career Readiness Standards (CCRS) approved by the commissioner of education and the Texas Higher Education Coordinating Board into the Texas Essential Knowledge and Skills (TEKS) and to adopt by rule a chart that clearly indicates the alignment of the CCRS with the TEKS.

TEC, §28.011, as amended by HB 2681, 87th Texas Legislature, Regular Session, 2021, allows school districts to offer an elective course on the Hebrew Scriptures and an elective course on the New Testament.

TEC, §28.012, requires the SBOE and the Texas Commission on Law Enforcement (TCOLE) to enter into a memorandum of understanding to provide instruction regarding proper interaction between civilians and peace officers in public schools, driver education courses, and peace officer training.

TEC, §28.014, requires each school district partner with at least one institution of higher education to develop and provide courses in college preparatory mathematics and English language arts.

TEC, §28.018, requires the SBOE by rule to establish an advanced computer science program for high school students that permits students to earn advanced math or science credit by successfully completing an advanced computer science course and under which participating districts would implement rigorous standards for advanced computer science courses that are focused on the creation and use of software and computing technologies.

TEC, §28.023, requires the SBOE to establish guidelines for school districts to follow in developing or selecting examinations for acceleration for elementary grade levels and for credit for secondary grade level academic subjects, including a requirement that a school district give a student in Grade 6 or above credit for a subject if the student earns a scaled score of 50 or higher on an examination approved by the board of trustees and administered through the College-Level Examination Program.

TEC, §28.025, as amended by HB 1603 and SB 1063, 87th Texas Legislature, Regular Session, 2021, requires the SBOE by rule to determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under the TEC, §28.002.

TEC, §28.0256, as amended by SB 369, 87th Texas Legislature, Regular Session, 2021, requires each student to complete a free application for federal student aid (FAFSA) or a Texas application for state financial aid (TASFA) in order to graduate. A student may opt-out of the financial aid application graduation requirement if a parent or guardian submits a signed opt-out form; if the student is 18 years of age or older and submits a signed opt-out form; or if a school counselor authorizes the student to decline to complete and submit the application for good cause.

TEC, §28.053, identifies the types of awards for which schools participating in the Texas Advanced Placement Incentive Program are eligible and identifies the manner in which funds awarded are to be used.

TEC, §28.054, identifies the requirements for students' entitlement to fee subsidies for a fee paid to take an Advanced Placement or International Baccalaureate examination.

TEC, §29.907, designates the week in which September 17 falls as Celebrate Freedom Week and allows the Texas Education Agency (TEA), in cooperation with other state agencies who voluntarily participate, to promote Celebrate Freedom Week through a coordinated program.

TEC, §33.081, as amended by HB 2721, 87th Texas Legislature, Regular Session, 2021, requires the SBOE to adopt rules to limit student participation for extracurricular activities during the school day and the school week and identifies requirements related to the suspension from participation in extracurricular activities of a student who receives a grade lower than the equivalent of 70 on a scale of 100 in academic classes identified in this section.

TEC, §38.003, identifies requirements for the screening or testing of all students enrolling in Texas public schools for dyslexia and related disorders.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: The SBOE last adopted the review of 19 TAC Chapter 74, Subchapters A-G, in November 2017, finding that the reasons for initially adopting the rules continued to exist. The proposed review of 19 TAC Chapter 74, Curriculum Requirements, was presented to the Committee on Instruction for discussion at the September 2021 meeting.

BACKGROUND INFORMATION AND JUSTIFICATION: Chapter 74 is organized as follows: Subchapter A, Required Curriculum; Subchapter B, Graduation Requirements; Subchapter C, Other Provisions; Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002; Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005; Subchapter F, Graduation Requirements, Beginning with School Year 2007-2008; and Subchapter G, Graduation Requirements, Beginning with School Year 2012-2013.

A summary of the subchapters and actions that have occurred since the last rule review follows.

Subchapter A, Required Curriculum

Subchapter A establishes definitions, requirements, and procedures related to required curricula for Kindergarten through Grade 12, including English language proficiency standards, the academic achievement record (transcript), and CCRS and TEKS alignment charts.

The 85th Texas Legislature, Regular Session, 2017, passed SB 30, to require the SBOE to adopt rules to include instruction on proper interaction with peace officers during traffic stops and other in-person encounters in one or more courses in the required curriculum for students in Grades 9-12. SB 671 passed by the 85th Texas Legislature, Regular Session, 2017, allows a student who successfully completes a dual language immersion program under TEC, §28.0051, at an elementary school to satisfy one credit of the two credits required in a language other than English (LOTE). In April 2018, the board adopted revisions to 19 TAC Chapter 74, Subchapter A, to update the rule for the academic achievement record to document the completion of requirements for instruction on proper interaction with law enforcement and completion of one LOTE credit requirement through successful completion of a dual language immersion program in elementary school. The board also adopted amendments to the rules for the academic achievement record to document the completion of requirements for speech, CPR instruction (if the instruction is provided in Grades 9-12), instruction on proper interaction with law enforcement, and completion of one LOTE credit requirement through successful completion of a dual language immersion program in elementary school.

HB 3, passed by the 86th Texas Legislature, 2019, added new TEC, §28.0256, to require that students complete and submit a FAFSA or a TASFA as a requirement for high school graduation. A student may formally opt out by submitting a TEA-approved form signed by the student's parent/guardian, a

counselor, or the student, if over age 18. In April 2021, the board adopted an amendment to 19 TAC §74.5 to require documentation of the completion of the financial aid application requirement.

TEC, §28.008, requires the SBOE to adopt by rule a chart that clearly indicates the alignment of the CCRS with the TEKS. In June 2019, the board adopted an amendment to 19 TAC Chapter 74, Subchapter A, to add a CCRS alignment chart for new English language arts TEKS adopted in 2019 and to reflect changes resulting from updates to the English language arts and mathematics CCRS.

The 86th Texas Legislature, 2019, passed HB 963, which required the SBOE to amend its rules to consolidate the TEKS for high school technology application courses with the TEKS for CTE courses and to eliminate duplicative courses. Additionally, SB 11 and HB 18, 86th Texas Legislature, 2019, amended the required curriculum in TEC, §28.002, to add suicide prevention to the topics included in health education. The statutory changes also clarified that health education must include physical health. In September 2020, the SBOE adopted amendments to 19 TAC Chapter 74, Subchapter A, to align the required curriculum and courses that districts and charter schools are required to make available to students with the updates to the technology applications and CTE courses required by HB 963 and to include provisions of SB 11 and HB 18.

Subchapter B, Graduation Requirements

Subchapter B specifies high school graduation requirements for the foundation high school program, established by HB 5, 83rd Texas Legislature, 2013, for students entering Grade 9 in the 2014-2015 school year and thereafter.

In April 2018, the SBOE adopted revisions to the subchapter to update the rules to align with legislative changes resulting from the 85th Texas Legislature, 2015, including reporting requirements for locally-developed cybersecurity programs and updating computer programming languages references to include computer coding (HB 3593); eliminating course sequencing requirements in English language arts and reading under the foundation high school program (SB 826); and adding the LOTE credit option for elementary students who successfully complete a dual language immersion program (SB 671). The SBOE also adopted revisions to clarify rules related to the award of credit for certain Advanced Placement (AP) Computer Science A or International Baccalaureate (IB) courses.

In June 2019, the SBOE adopted additional revisions to the subchapter to update the graduation requirements to align with changes to the TEKS for fine arts adopted in 2019; to provide additional clarification for the appropriate amount of state credit that should be awarded for IB courses, and to establish courses to be included in a cybersecurity pathway required by HB 3593, 85th Texas Legislature, Regular Session, 2017, for the science, technology, engineering, and mathematics (STEM) endorsement.

In April 2020, the board adopted revisions to the subchapter to update the rules to align with legislative changes resulting from the 86th Texas Legislature, 2019, including aligning with the consolidation of technology applications courses with the CTE TEKS (HB 963) and reflecting revisions to CTE programs of study. The board adopted additional revisions to the subchapter in January 2021 to add the financial aid application graduation requirement in accordance with HB 3, 86th Texas Legislature, 2019.

Proposed amendments to 19 TAC Chapter 74, Subchapter B, are presented for discussion as a separate item in this agenda. The proposed amendments include updating rules related to the foundation high school program to align with recent legislation, update course titles, add new courses to satisfy specific graduation requirements, and make technical edits.

Subchapter C, Other Provisions

Subchapter C includes provisions relating to options for offering courses; correspondence courses and distance learning; credit by examination; high school credit for college courses; award of credit; innovative courses and programs; students with dyslexia and related disorders; the Texas Advanced Placement Incentive Program; identification of honors courses; health classifications for physical education; additional requirements for social studies classes for Grades 3-12; additional requirements for high school health classes; requirements for elective courses on the Bible's Hebrew Scriptures (Old Testament) and the New Testament and their impact on the history and literature of Western civilization; public school physical education curriculum; and requirements for instruction in CPR.

In June 2018, the SBOE adopted amendments to rules related to dyslexia and related disorders, instruction on interactions with peace officers, and credit by examination. The 85th Texas Legislature, Regular Session, 2017, passed HB 1886 amending TEC, §38.003, to specify that a student enrolled in public school must be screened or tested, as appropriate, for dyslexia and related disorders at appropriate times in accordance with a program approved by the SBOE. The changes adopted by the SBOE in June 2018 clarified the screening requirement and student access for services. SB 30, 85th Texas Legislature, Regular Session, 2017, added TEC, §28.012, to require the SBOE to enter into a memorandum of understanding with TCOLE to establish the respective responsibilities of each agency in developing instruction, including curriculum and instructional modules, on proper interaction with peace officers during traffic stops and other in-person encounters. The SBOE adopted new rules for the instruction in interactions with peace officers, as required by SB 30. The changes to rules on credit by examination amended the provisions related to test development and validation.

TEC, §38.003(c), requires the SBOE to adopt any rules and standards necessary to administer requirements for screening and services for dyslexia and related disorders under TEC, §38.003. In February 2019, the SBOE adopted in rule the updated *Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders (Dyslexia Handbook)*. In September 2019, the board adopted an amendment to the rule to require school districts and open-enrollment charter schools to report to the TEA through the Texas Student Data System (TSDS) Public Education Information Management System (PEIMS) the results of screening for dyslexia and related disorders to support administration of TEC, §38.003, requirements.

In November 2019, the board adopted an amendment to modify the requirements for approval of innovative courses, to specify that innovative courses cannot be approved if they substantially duplicate the content of TEKS-based courses, and to add requirements for review of ethnic studies innovative courses approved by the commissioner. In January 2020, the board adopted an amendment to clarify that a district may award credit proportionately for successful completion of half of a course regardless of the time duration of the course. In September 2021, the board adopted updates to the *Dyslexia Handbook* adopted as Figure: 19 TAC §74.28(c) to clarify requirements related to student evaluation and the required dyslexia screening for students in Kindergarten and Grade 1. No additional changes to 19 TAC Chapter 74, Subchapter C, are recommended at this time.

Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002; Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005; Subchapter F, Graduation Requirements, Beginning with School Year 2007-2008; Subchapter G, Graduation Requirements, Beginning with School Year 2012-2013

Subchapter D specifies high school graduation requirements for students entering Grade 9 in the 2001-2002, 2002-2003, or 2003-2004 school year.

Subchapter E specifies high school graduation requirements for students entering Grade 9 in the 2004-2005, 2005-2006, or 2006-2007 school year.

Subchapter F specifies high school graduation requirements for students entering Grade 9 in the 2007-2008, 2008-2009, 2009-2010, 2010-2011, or 2011-2012 school year.

Subchapter G specifies high school graduation requirements for students entering Grade 9 in the 2012-2013 or 2013-2014 school year.

As a result of this review, it was determined that the graduation requirements in 19 TAC Chapter 74, Subchapters D and E, are out-of-date and no longer necessary. The proposed repeal of 19 TAC Chapter 74, Subchapters D and E, is presented for first reading and filing authorization as a separate item in this agenda. No additional changes to 19 TAC Chapter 74, Subchapters F and G, are recommended as a result of the review.

The text of 19 TAC Chapter 74 is not included as an attachment to this item due to the volume of rules; however, the rules are viewable on the TEA's website at <https://tea.texas.gov/about-tea/laws-and-rules/texas-administrative-code/19-tac-chapter-74>.

If authorized by the SBOE, the TEA will file the adopted review with the *Texas Register* stating that the SBOE finds the reasons for adopting 19 TAC Chapter 74 continue to exist. The filing of the adopted review stating that the reasons for adoption continue to exist would not preclude any amendments that may be proposed at different dates through a separate rulemaking process.

PUBLIC COMMENTS: TEA filed the notice of proposed review of 19 TAC Chapter 74, Subchapters A-G, with the *Texas Register* following the September 2021 SBOE meeting. The public comment period on the proposed review began October 8, 2021, and ended at 5:00 p.m. on November 12, 2021. At the time this item was prepared, no comments had been received regarding this review. Any public comments received will be provided to the SBOE during the November 2021 meeting. The SBOE will take registered oral and written comments on the proposed review at the committee meeting in November 2021 in accordance with the SBOE board operating policies and procedures.

MOTION TO BE CONSIDERED: The State Board of Education:

Adopt the review of 19 TAC Chapter 74, Curriculum Requirements.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Approval of Updates and Substitutions to Adopted Instructional Materials

November 19, 2021

COMMITTEE ON INSTRUCTION: ACTION
STATE BOARD OF EDUCATION: CONSENT

SUMMARY: This item provides the opportunity for the committee to approve update and/or substitution requests received since the last board meeting. The updated content has been reviewed by subject-area specialists and determined to address the pertinent student expectations in a manner equal to the content initially reviewed and approved by the state review panel.

STATUTORY AUTHORITY: Texas Education Code (TEC), §31.003 and §31.022.

TEC, §31.003, permits the State Board of Education (SBOE) to adopt rules for the adoption, requisition, distribution, care, use, and disposal of instructional materials.

TEC, §31.022(b), requires the SBOE to adopt rules to provide for a full and complete investigation of instructional materials for each subject in the foundation curriculum and for each subject in the enrichment curriculum.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: In February 2015, the SBOE approved a substitution request for three science products, kindergarten–grade 2, from Discovery Education. In April 2016, the SBOE approved an update request for two math products, grades 6–8, from Texas State University. In April 2019, the Committee on Instruction (COI) postponed a vote on an update request for three English language arts and reading products, grades 6–8, from ThinkCERCA. The board approved the update request from ThinkCERCA at the June 2019 meeting. At the September 2019 meeting, the SBOE postponed a vote on an update request from EDUSPARK, Inc. for four Spanish language arts and reading products, kindergarten, and grades 1, 4, and 5. The request from EDUSPARK, Inc. was approved by the SBOE at the November 2019 meeting. In January 2020, a substitution request from Origo Education for English and Spanish math, kindergarten–grade 5, was submitted to the COI but no action was taken. In April 2020, the SBOE approved the substitution request from Origo Education for English and Spanish math, kindergarten–grade 5. In September 2020, the SBOE approved an update request from Learning A–Z for six English language arts and reading products, kindergarten–grade 2. In November 2020, the SBOE approved an update request from Learning A–Z for three English language arts and reading products, grades 2–4. In January 2021, the SBOE approved an update request from Learning A–Z for English language arts and reading, grade 5 and a substitution request from QuaverEd for their prekindergarten product. In April 2021, the SBOE approved an update request from EDUSPARK, Inc. for English and Spanish prekindergarten products and a substitution request from Cheng & Tsui Co. Inc. for their Chinese Level I languages other than English product. In June 2021, the SBOE approved an update request from Learning A–Z for English language arts and reading, grades 2–4. In September 2021, the SBOE approved update requests from The Children’s Learning Institute at UT Health Science Center for prekindergarten English and Spanish.

BACKGROUND INFORMATION AND JUSTIFICATION: Rules in 19 TAC §66.75 permit a publisher to submit a request for approval to substitute an updated edition of state-adopted instructional materials. The rule also requires that all requests for updates involving content in state-adopted

instructional materials be approved by the SBOE prior to their introduction into state-adopted instructional materials.

Rules in 19 TAC §66.76 permit a publisher to submit a request for approval to substitute a new edition of state-adopted instructional materials. The rule also requires that all requests for updates involving content used in determining the product's eligibility for adoption must be approved by the SBOE prior to their introduction into state-adopted instructional materials.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve instructional materials update and/or substitution requests as presented in the Separate Exhibit.

Staff Members Responsible:

Melissa Lautenschlager, Director, Instructional Materials and Implementation
Amie Williams, Director, Instructional Materials Review and Procurement

Attachment I:

[Cheng & Tsui's Integrated Chinese Volume 2 Level 1 Part 2 textbook](#)

Attachment II:

[Cheng & Tsui's Integrated Chinese Volume 2 Level 1 Part 2 workbook](#)

Attachment III:

[Cheng & Tsui's Integrated Chinese Volume 3 Level 2 Part 1 textbook](#)

Attachment IV:

[Cheng & Tsui's Integrated Chinese Volume 3 Level 2 Part 1 workbook](#)

Attachment V:

[Cheng & Tsui's Integrated Chinese Volume 4 Level 2 Part 1 textbook](#)

Attachment VI:

[Cheng & Tsui's Integrated Chinese Volume 4 Level 2 Part 1 workbook](#)

Attachment VII:

[Learning A–Z English language arts and reading, grades 1–5](#)

Separate Exhibit:

Additional Updates and/or Substitutions Submitted for Approval
(to be provided at the November 2021 SBOE meeting)

Proposed Approval of Innovative Courses

November 19, 2021

COMMITTEE ON INSTRUCTION: ACTION
STATE BOARD OF EDUCATION: ACTION

SUMMARY: This item recommends approval of innovative courses that do not fall within any of the subject areas of the foundation or enrichment curriculum.

STATUTORY AUTHORITY: Texas Education Code ([TEC](#)), [§28.002\(f\)](#).

TEC, §28.002(f), authorizes local school districts to offer courses in addition to those in the required curriculum for local credit and requires the State Board of Education (SBOE) to be flexible in approving a course for credit for high school graduation.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: The SBOE adopted 19 TAC §74.27, Innovative Courses and Programs, to be effective September 1, 1996, with amendments to be effective September 1, 1998, and December 25, 2007. In November 2019, the SBOE adopted additional amendments to 19 TAC §74.27 to be effective December 25, 2019.

From May 1998 through July 2003, the SBOE approved a total of 45 new innovative courses that do not fall within any of the subject areas of the foundation or enrichment curriculum through the annual approval process. In May 2004, July 2007, July 2009, January 2011, January 2012, January 2013, and July 2014 the SBOE approved the renewal of innovative courses in addition to approving new courses. In April 2005, April 2006, May 2008, May 2010, and April 2014 the SBOE approved renewal of innovative courses. In July 2010, the SBOE approved one new course. In April 2015, the SBOE approved for a period of five years three expiring course series submitted for renewal. In April 2016, the SBOE approved one new course for a period of three years and one new course for a one-year period. The SBOE approved for a period of five years each the renewal of three expiring innovative courses in November 2016. At the January-February 2017 meeting, the SBOE approved for renewal two expiring innovative courses for a period of five years, and at the April 2017 SBOE meeting, the SBOE approved for renewal three additional courses for a period of five years each. At the June 2017 SBOE meeting, the SBOE approved two new courses for a period of five years each. At the April 2018 SBOE meeting, the SBOE approved one new course for a period of five years. At the January-February 2019 SBOE meeting, the SBOE renewed one course for a period of three years and granted one course a one-year extension. At the April 2019 SBOE meeting, the board approved for renewal two courses for a period of three years and one course for a period of five years. At the June 2019 SBOE meeting, the board approved renewal of one course for a period of three years and one new course for a period of two years. The board approved renewal of eight innovative courses for a period of five years at the January 2020 SBOE meeting. At the June-July 2020 SBOE meeting, the SBOE renewed ten courses for a period of five years and granted one new course a two-year approval. In January 2021, the SBOE renewed one course for a period of five years.

BACKGROUND INFORMATION AND JUSTIFICATION: After the board adopted new rules concerning graduation requirements, the experimental courses previously approved were phased out as of

August 31, 1998. As a result of the adoption of the Texas Essential Knowledge and Skills (TEKS), districts now submit new requests for innovative course approval for courses that do not have TEKS.

The process outlined in 19 TAC §74.27 provides authority for the commissioner of education to approve discipline-based courses, but reserves for SBOE review and approval those courses that do not fall within any of the subject areas of the foundation or enrichment curriculum.

A brief description of the courses submitted for SBOE review and consideration will be provided to SBOE members at the November 2021 meeting. If approved, the recommended effective date for the courses would be August 1, 2022. With the approval of the local board of trustees, the courses would be available for school districts' use beginning with the 2022-2023 school year.

PUBLIC BENEFIT AND COST TO PERSONS: Students would have access to courses that meet local district needs.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve the innovative courses that do not fall within any of the subject areas of the foundation or enrichment curriculum as shown in the separate exhibit.

Staff Members Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services
Shelly Ramos, Senior Director, Curriculum Standards and Student Support

Attachment:

Text of 19 TAC §74.27, [Innovative Courses and Programs](#)

Separate Exhibit:

Innovative Courses Recommended for Approval
(to be provided at the November 2021 SBOE meeting)

ATTACHMENT

Text of 19 TAC

Chapter 74. Curriculum Requirements

Subchapter C. Other Provisions

§74.27. Innovative Courses and Programs.

- (a) A school district may offer innovative courses to enable students to master knowledge, skills, and competencies not included in the essential knowledge and skills of the required curriculum.
 - (1) The State Board of Education (SBOE) may approve any course that does not fall within any of the subject areas listed in the foundation and enrichment curricula when the applying school district or organization demonstrates that the proposed course is academically rigorous and addresses documented student needs.
 - (2) The commissioner of education may approve a discipline-based course in the foundation or enrichment curriculum when the applying school district or organization demonstrates that the proposed course is academically challenging and addresses documented student needs.
 - (3) Applications shall not be approved if the proposed course significantly duplicates the content of a Texas Essential Knowledge and Skills (TEKS)-based course or can reasonably be taught within an existing TEKS-based course.
 - (4) To request approval from the SBOE or the commissioner of education, the applying school district or organization must submit a request for approval at least six months before planned implementation that includes:
 - (A) a description of the course and its essential knowledge and skills;
 - (B) the rationale and justification for the request in terms of student need;
 - (C) data that demonstrates successful implementation or piloting of the course;
 - (D) a description of activities, major resources, and materials to be used;
 - (E) the methods of evaluating student outcomes;
 - (F) the qualifications of the teacher;
 - (G) any training required in order to teach the course and any associated costs; and
 - (H) the amount of credit requested.
 - (5) To request approval from the commissioner for a career and technical education innovative course, the applying school district or organization must submit with its request for approval evidence that the course is aligned with state and/or regional labor market data.
 - (6) With the approval of the local board of trustees, a school district may offer, without modifications, any state-approved innovative course.
- (b) An ethnic studies course that has been approved by the commissioner as an innovative course shall be presented to the SBOE for discussion and consideration for inclusion in the TEKS.

- (1) Only comprehensive ethnic studies courses in Native American studies, Latino studies, African American studies, and/or Asian Pacific Islander studies, inclusive of history, government, economics, civic engagement, culture, and science and technology, shall be presented to the SBOE for consideration.
- (2) The chair of the Committee on Instruction, in accordance with SBOE Operating Rule 2.5(b) shall collaborate with the board chair to place the item on the next available Committee on Instruction agenda following commissioner approval of the innovative course.

**COMMITTEE ON SCHOOL FINANCE/
PERMANENT SCHOOL FUND**

**Approval of Costs to Administer the 2021–2022 State-Developed Assessments
to Private School Students**

November 19, 2021

**COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: ACTION
STATE BOARD OF EDUCATION: CONSENT**

SUMMARY: Texas Education Code, §39.033, allows a private school to voluntarily assess its students with the State of Texas Assessments of Academic Readiness (STAAR®) and the Texas English Language Proficiency Assessment System (TELPAS) assessments. The State Board of Education (SBOE) must approve the per-student cost to private schools, which may not exceed the cost of administering the same assessment to a student enrolled in a public school district. This item requests approval of these costs for the 2021–2022 school year.

STATUTORY AUTHORITY: Texas Education Code ([TEC](#)), [§39.033](#).

TEC, §39.033 permits, through an agreement with the Texas Education Agency (TEA), private schools to administer adopted assessment instruments if private schools reimburse TEA the cost for administering the assessment. The per-student cost of administering adopted assessments is determined by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: In November 2020, the SBOE approved the costs of administering the STAAR and TELPAS assessments to private school students for the 2020–2021 school year.

BACKGROUND INFORMATION AND JUSTIFICATION: Since the spring 1996 test administration, private schools, including home schools, have been eligible to participate on a voluntary basis in the Texas assessment program. During the 2020–2021 school year, participation in these voluntary assessments for grades 3 through 12 involved 17 private schools and 2,558 students. Attachment II lists the 2020–2021 participating private schools.

Under TEC, §39.033, private schools that administer the tests must enter into an agreement with TEA. The agreement requires private schools, as determined appropriate by the commissioner of education, to provide the commissioner the information listed in TEC, §39.053(c) and §39.301(c), which includes information to be used as indicators of academic performance, and to maintain confidentiality as required under TEC, §39.030. Private schools that participate in the assessments must provide reimbursement for the cost of administering the assessments, which may not exceed the per-student cost of administering the same assessment to a student enrolled in a public school district. In addition, participating private schools must agree to test all eligible students and to administer the primary form of all subject-area tests available for a particular grade.

A critical component of the contract with private schools is the per-student cost for each instrument, which must be determined by the SBOE. Attachment I displays the recommended per-student cost for each test that will be available to private schools in the 2021–2022 school year. These figures were derived by taking the costs from the agency's contracts for development and administration of the spring 2022 tests and dividing by the maximum number of tests that will be administered in spring 2022. Using this method for determining the per-student cost ensures that the cost for assessing a private school student will not exceed the per-student cost for administering the same test to a public-school student.

Costs cover developing tests and ancillary materials; printing, packaging, and shipping test materials; scoring tests; and reporting results.

FISCAL IMPACT: The figures provided in Attachment I cover the costs of administering the STAAR and TELPAS assessments. There are no additional fiscal implications.

DATA AND REPORTING IMPACT: Private schools choosing to administer the statewide tests must agree to follow standard procedures for test administration, maintain security and confidentiality, and report to the commissioner their test results and other information outlined in TEC, §39.053(c) and §39.301(c).

MOTION TO BE CONSIDERED: The State Board of Education:

Approve the recommended per-student costs for administering the state assessments to private school students in the 2021–2022 school year as listed in Attachment I.

Staff Members Responsible:

Iris Tian, Division Director, Student Assessment

Julie Cole, Director of Policy and Publications, Student Assessment

[Attachment I:](#)

Recommended Private School Costs for the 2021–2022 School Year

[Attachment II:](#)

Private School Participation List for Spring 2021 Administrations

Recommended Private School Costs for the 2021–2022 School Year

State of Texas Assessments of Academic Readiness (STAAR®) and Texas English Language Proficiency Assessment System (TELPAS)

Program	Test	Number of Tests Based on Eligible Testers	Total Cost	Cost per Student per Test	Recommended Cost per Private School Student per Test
STAAR	English I and English II	1,168,921	\$12,275,219	\$10.50	\$10.50
	Grades 3–8 Reading*	2,388,887	\$16,797,041	\$7.03	\$7.03
	Mathematics*	2,876,269	\$17,935,588	\$6.24	\$6.24
	Science*	1,313,761	\$7,636,941	\$5.81	\$5.81
	Social Studies	837,232	\$4,887,441	\$5.84	\$5.84
TELPAS	Kindergarten–Grade 12	994,667	\$9,569,741	\$9.62	\$9.62

*Includes English and Spanish versions for grades 3–5.

**Private School Participation List
Spring 2021 Administrations**

CDC	Campus Name	STAAR End-of-Course	STAAR Grades 3-8	TELPAS	Grand Total
084603041	Academy of Captivating Achievement	1	1	0	2
101604000	Darul Arqam North	51	175	0	226
043602000	Good Tree Academy	48	196	0	244
101614000	Houston Quran Academy	64	247	0	311
101607000	Iman Academy SE	43	211	0	254
101299000	Iman Academy SW	63	125	0	188
015203001	Islamic Academy of San Antonio	0	0	10	10
057606000	Islamic School of Irving	166	380	0	546
000101000	Madrassat Al Nur	0	41	0	41
079602000	New Millennium Montessori School	0	42	0	42
057613000	Qalam Collegiate Academy	53	40	0	93
057614000	Radiant STEM Academy	52	97	0	149
043603000	Read Institute of Texas	0	12	0	12
001227000	Renaissance Academy	52	189	0	241
003130000	St. Cyprian's Episcopal School	25	154	0	179
019601001	St. James Day School	9	0	0	9
166601000	St. Paul Lutheran, Thorndale	1	10	0	11
Totals	17	628	1,920	10	2,558

Review of Permanent School Fund Securities Transactions and the Investment Portfolio

November 18, 2021

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: DISCUSSION STATE BOARD OF EDUCATION: NO ACTION

SUMMARY: Investment staff will report on the transactions executed during the months of July, August, and September 2021 in the investment portfolio of the Texas Permanent School Fund.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#), and 19 Texas Administrative Code (TAC) Chapter 33.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the State Board of Education (SBOE) to manage and invest the permanent school fund in accordance with the prudent person standard.

19 TAC Chapter 33 codifies administrative rules that provide a statement of investment objectives, policies, and guidelines of the Texas Permanent School Fund and Bond Guarantee Program as adopted by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

BACKGROUND INFORMATION AND JUSTIFICATION: Specific actions that the committee must accomplish are found in 19 TAC Chapter 33, [Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund](#).

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

**Ratification of the Purchases and Sales of the Investment Portfolio of the Permanent School Fund
for the Months of July, August, and September 2021**

November 19, 2021

**COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: ACTION
STATE BOARD OF EDUCATION: CONSENT**

SUMMARY: This item provides an opportunity for the committee and board to consider approval of the purchases and sales of investments executed in the portfolio of the Permanent School Fund (PSF) for the months of July, August, and September 2021.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#), and 19 Texas Administrative Code (TAC) Chapter 33.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the State Board of Education (SBOE) to manage and invest the permanent school fund in accordance with the prudent person standard.

19 TAC Chapter 33 codifies administrative rules that provide a statement of investment objectives, policies, and guidelines of the Texas Permanent School Fund and Bond Guarantee Program as adopted by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: At the September 2021 meeting, the board approved purchases in the amount of \$1,112,312,733 and sales in the amount of \$1,231,656,279 conducted in the investment portfolio of the PSF for the months of May and June 2021.

BACKGROUND INFORMATION AND JUSTIFICATION: The purchases and sales of the investment portfolio are reviewed by the staff to ensure compliance with the Investment Guidelines, Policies, and Objectives of the PSF. The specific amounts of the purchases and sales for the reporting period will be recommended to the board for ratification upon approval by the Committee on School Finance/Permanent School Fund.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

Report on Permanent School Fund Liquid Account and Ratification of Purchases and Sales for the Months of July, August, and September 2021

November 19, 2021

**COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: ACTION
STATE BOARD OF EDUCATION: CONSENT**

SUMMARY: This item provides an opportunity for the committee and board to receive a status update report on the liquid account and consider approval of the purchases and sales of investments executed in the liquid account for the months of July, August, and September 2021.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#); Texas Natural Resources Code ([NRC](#)), [§51.414](#), as repealed by SB 1232, 87th Legislature, Regular Session, 2021; and 19 Texas Administrative Code (TAC) Chapter 33.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the State Board of Education (SBOE) to manage and invest the permanent school fund in accordance with the prudent person standard.

NRC, §51.414, created the Liquid Account within the Permanent School Fund to be managed by the SBOE.

19 TAC Chapter 33 codifies administrative rules that provide a statement of investment objectives, policies, and guidelines of the Texas Permanent School Fund and Bond Guarantee Program as adopted by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: At the September 2021 meeting, the board approved purchases in the amount of \$156,071,850 and sales in the amount of \$44,518,526 for the Permanent School Fund Liquid Account for the period May 1, 2021, through June 30, 2021.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

Review of the Permanent School Fund Liquid Account Strategic Asset Allocation

November 19, 2021

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: ACTION STATE BOARD OF EDUCATION: CONSENT

SUMMARY: This item provides an opportunity for the committee and board to review the Permanent School Fund liquid account strategic asset allocation.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#); Texas Natural Resources Code ([NRC](#)), [§51.414](#), as repealed by SB 1232, 87th Legislature, Regular Session, 2021; and 19 Texas Administrative Code (TAC) Chapter 33.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the State Board of Education (SBOE) to manage and invest the permanent school fund in accordance with the prudent person standard.

NRC, §51.414, created the Liquid Account within the Permanent School Fund to be managed by the SBOE.

19 TAC Chapter 33 codifies administrative rules that provide a statement of investment objectives, policies, and guidelines of the Texas Permanent School Fund and Bond Guarantee Program as adopted by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: At the June 2020 meeting, the board adopted the long-term strategic asset allocation plan of the Permanent School Fund Liquid Account.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

Overview of Permanent School Fund Investment Portfolio

November 18, 2021

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: DISCUSSION STATE BOARD OF EDUCATION: NO ACTION

SUMMARY: This item provides an opportunity for the committee to receive an overview of the Permanent School Fund investment portfolio.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#), and 19 Texas Administrative Code (TAC) Chapter 33.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the State Board of Education (SBOE) to manage and invest the permanent school fund in accordance with the prudent person standard.

19 TAC Chapter 33 codifies administrative rules that provide a statement of investment objectives, policies, and guidelines of the Texas Permanent School Fund and Bond Guarantee Program as adopted by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

Review of the Absolute Return Asset Class for the Permanent School Fund

November 19, 2021

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: ACTION STATE BOARD OF EDUCATION: CONSENT

SUMMARY: This item provides an opportunity for the committee and board to review the absolute return asset class.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#); 19 Texas Administrative Code (TAC) Chapter 33.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the State Board of Education (SBOE) to manage and invest the permanent school fund in accordance with the prudent person standard.

19 TAC Chapter 33 codifies administrative rules that provide a statement of investment objectives, policies, and guidelines of the Texas Permanent School Fund and Bond Guarantee Program as adopted by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: At the June 2020 meeting, the board approved the Permanent School Fund Long-Term Strategic Asset Allocation Plan with an allocation of 7% to the absolute return asset class.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

Proposed New 19 TAC Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation
(First Reading and Filing Authorization)

November 19, 2021

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: ACTION
STATE BOARD OF EDUCATION: CONSENT

SUMMARY: This item presents for first reading and filing authorization proposed new 19 Texas Administrative Code (TAC) Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation. The proposed new section would address the term length of State Board of Education (SBOE) members on the board of directors of the Texas Permanent School Fund (PSF) Corporation as required by Senate Bill (SB) 1232, 87th Texas Legislature, Regular Session, 2021.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §5\(a\) and \(f\)](#), and Texas Education Code (TEC), [§43.001](#) and [§43.053](#), as added by SB 1232, 87th Legislature, Regular Session, 2021.

Texas Constitution, Article VII, §5(a), authorizes the SBOE to make distributions from the PSF to the available school fund with certain limits.

Texas Constitution, Article VII, §5(f), authorizes the SBOE to manage and invest the PSF according to the prudent investor standard and make investments it deems appropriate.

TEC, §43.001, describes the PSF as a perpetual endowment.

TEC, §43.053, as added by SB 1232, 87th Texas Legislature, Regular Session, 2021, establishes the composition of the board of directors of the Texas PSF Corporation and requires the SBOE to establish by rule the terms of SBOE members of the board of directors. SB 1232 allows the SBOE to create the Texas PSF Corporation and delegate its authority to manage the PSF and the charter district bond guarantee reserve fund to the corporation.

The full text of statutory citations can be found in the statutory authority section of this agenda.

EFFECTIVE DATE: The proposed effective date of the proposed new section is 20 days after filing as adopted with the Texas Register. Under TEC, §7.102(f), the SBOE must approve the rule action at second reading and final adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2022-2023 school year. The earlier effective date would allow the rule to align with statute as soon as possible.

PREVIOUS BOARD ACTION: The SBOE initially adopted rules in Chapter 33 effective September 1, 1996. At the September 2021 SBOE meeting, the Committee on School Finance/Permanent School Fund discussed SB 1232, 87th Texas Legislature, Regular Session, 2021, and the possible need to update rules in 19 TAC Chapter 33.

BACKGROUND INFORMATION AND JUSTIFICATION: In accordance with statute, the rules in 19 TAC Chapter 33 establish investment objectives, policies, and guidelines for the Texas PSF.

SB 1232, 87th Texas Legislature, Regular Session, 2021, allows the SBOE to create the Texas PSF Corporation and delegate its authority to manage the PSF to the corporation. Specifically, SB 1232 added new TEC, §43.053, which establishes the composition of the board of directors of the Texas PSF Corporation and requires the SBOE to establish by rule the terms of SBOE members of the board of directors.

Proposed new §33.21 would specify that the term of office for an SBOE member who serves on the Texas PSF Corporation board of directors will end when that member no longer serves on the SBOE Committee on School Finance/Permanent School Fund.

FISCAL IMPACT: The Texas Education Agency (TEA) has determined that there are no additional costs to state or local government required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would create a new regulation by adding provisions in alignment with recent statutory changes. The new provisions address the SBOE's responsibilities in relation to the PSF.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand, limit, or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: The proposal would align with statute and clarify provisions supporting the management and investment of the PSF. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins December 17, 2021, and ends at 5:00 p.m. on January 21, 2022. The SBOE will take registered oral and written comments on the

proposal at the appropriate committee meeting in January 2022 in accordance with the SBOE board operating policies and procedures. A request for a public hearing on the proposal submitted under the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the *Texas Register* on December 17, 2021.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve for first reading and filing authorization proposed new 19 TAC Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

Attachment:

Text of Proposed New 19 TAC Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules, §33.21, Texas Permanent School Fund Corporation

ATTACHMENT
Text of Proposed New 19 TAC

**Chapter 33. Statement of Investment Objectives, Policies, and Guidelines of the Texas
Permanent School Fund**

Subchapter A. State Board of Education Rules

§33.21. Texas Permanent School Fund Corporation.

Terms of directors. Any State Board of Education (SBOE) member who is appointed to the Texas Permanent School Fund (PSF) Corporation board of directors pursuant to SBOE policy under Texas Education Code, §43.053(a)(1), shall cease to be a Texas PSF Corporation director upon the expiration of his or her term of service on or upon other separation from the SBOE Committee on School Finance/Permanent School Fund in accordance with the SBOE's rules and policies.

**Report of the Permanent School Fund Executive Administrator and
Chief Investment Officer**

November 18, 2021

**COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND: DISCUSSION
STATE BOARD OF EDUCATION: NO ACTION**

SUMMARY: The Permanent School Fund (PSF) executive administrator will report to the committee on matters relating to the management of the PSF and the Charter District Reserve Fund. The report may present information on historical and current status of fund holdings, current and proposed investment policies and procedures, and historical and current fund performance and compliance. The administrator may update the board on the bond guarantee program, the status of requests for proposal, or for qualifications and current contracts for services and other administrative activities undertaken on behalf of the board. The administrator may provide an update on the PSF distribution or on the effect of legislation impacting the PSF. The administrator may provide an analysis of current and future investment market conditions, focusing upon the impact on the holdings of the PSF.

STATUTORY AUTHORITY: Texas Constitution, [Article VII, §2](#) and [§5](#), and 19 Texas Administrative Code (TAC) Chapter 33.

The Texas Constitution, Article VII, §2 and §5 establish the permanent school fund, the assets that comprise the permanent school fund, the bond guarantee program, the available school fund, and authorize the State Board of Education (SBOE) to manage and invest the permanent school fund in accordance with the prudent person standard.

19 TAC Chapter 33 codifies administrative rules that provide a statement of investment objectives, policies, and guidelines of the Texas Permanent School Fund and Bond Guarantee Program as adopted by the SBOE.

The full text of statutory citations can be found in the statutory authority section of this agenda.

Staff Member Responsible:

Holland Timmins, Executive Administrator and Chief Investment Officer, Texas Permanent School Fund

COMMITTEE ON SCHOOL INITIATIVES

**Recommendation for Reappointments to the Fort Sam Houston
Independent School District Board of Trustees**

November 19, 2021

**COMMITTEE ON SCHOOL INITIATIVES: ACTION
STATE BOARD OF EDUCATION: CONSENT**

SUMMARY: This item provides an opportunity for the board to consider three reappointments to the board of trustees of Fort Sam Houston Independent School District (ISD). The reappointments are necessary due to the expiration of the terms of office of three board members.

STATUTORY AUTHORITY: Texas Education Code (TEC), §11.352, and 19 Texas Administrative Code (TAC) §61.2.

TEC, §11.352 authorizes the State Board of Education (SBOE) to appoint school board members in special purpose school districts.

The full text of statutory citations can be found in the statutory authority section of this agenda.

BACKGROUND INFORMATION AND JUSTIFICATION: The SBOE is statutorily authorized to appoint board members for military reservation ISDs. Trustees so appointed shall hold office for two years and until their successors are appointed and qualified. Enlisted military personnel may be appointed to the board, however, a majority must be civilians, and all may be civilians. When a vacancy occurs on one of these boards, the base commander notifies the commissioner of education of the vacancies in compliance with TEC, §11.352. Vacancies are widely advertised through base newspapers, email, and other electronic methods. Interested individuals submit resumes and other documents verifying that they are qualified to hold the position and would accept it if appointed.

The commanding officer appoints a nomination panel of at least three members who review the application packages, interview the candidates, and evaluate the candidates. The panel's recommendations are forwarded to the commanding officer for consideration. The commanding officer is required by 19 TAC §61.2 to provide at least one nomination to the SBOE. All nominees must be qualified under the general school laws of Texas and live or be employed on the military reservation.

Col. Shane R. Cuéllar, commander of the 502d Force Support Group, United States Army has notified the commissioner that the terms of three current trustees of the Fort Sam Houston ISD are expiring. Colonel Cuéllar recommends the reappointments of Mr. Willie E. White, Ms. Deborah E. Seabron, and Ms. Andrea Nicholas to the Fort Sam Houston ISD Board of Trustees.

MOTION TO BE CONSIDERED: The State Board of Education:

Based on Col. Shane R. Cuéllar's recommendation, approve the reappointments of Mr. Willie E. White, Ms. Deborah E. Seabron, and Ms. Andrea Nicholas to serve the terms of office from November 19, 2021, through November 19, 2023, on the Fort Sam Houston ISD Board of Trustees.

Staff Members Responsible:

Jeffrey Cottrill, Deputy Commissioner, Governance and Accountability

Christopher Lucas, Director, Policy, Planning, and Operations, Governance and Accountability

Attachment:

Correspondence from Col. Shane R. Cuéllar that includes biographical information and supporting materials for each nominee



**DEPARTMENT OF THE AIR FORCE
502D AIR BASE WING
JOINT BASE SAN ANTONIO**



MEMORANDUM FOR MR. MIKE MORATH, COMMISSIONER, TEXAS EDUCATION AGENCY
1701 North Congress Avenue
Austin TX 78701

FROM: 502 FSG/CC
2330 Stanley Road, Suite A
JBSA Ft Sam Houston TX 78234-2362

SUBJECT: The Appointment of Mr. Willie E. White, Ms. Deborah E. Seabron, and Ms. Andrea Nicholas to the Fort Sam Houston Independent School District (FSHISD) Board of Trustees

1. I would like to respectfully request appointment for Mr. Willie E. White, Ms. Deborah E. Seabron, and Ms. Andrea Nicholas to the FSHISD Board of Trustees. Enclosed is the resume for the position, as required by Texas Administrative Code Section 61.2a (1), along with signed statement expressing their willingness to accept the appointment and serve in full adherence to the established state standards for school board members.
2. The nominees are qualified under the general school laws of Texas and nominee either lives or works on Joint Base San Antonio Fort Sam Houston (JBSA FSH). The nominees are well qualified and would be in full compliance with the provisions of the Texas Education Code 11.352. Every avenue was used to reach the widest possible applicant pool. The membership composition of the board of trustees is in compliance with the provisions of Texas Code 11.28.
3. I recognize the power of the Board of Trustees is to govern and manage the operations of FSHISD and recognize that my role as the commanding officer of 502d Force Support Group is limited only to the duty defined by the statute in the process for appointing the Board of Trustees.
4. Thank you for your support of our school district. If you have any questions, please contact Ms. Nita Ford-Hightower, JBSA FSH School Liaison, at (210) 221-2214 or nita.j.fordhightower.civ@mail.mil.

A handwritten signature in blue ink that reads "Shane R. Cuéllar".

SHANE R. CUÉLLAR, Colonel, USA
Commander, 502d Force Support Group

Attachments:
Mr. Willie E. White
Ms. Deborah E. Seabron
Ms. Andrea Nicholas



Joint Base San Antonio Statement of Eligibility

Applicant Full Name: WHITE, WILLIE EDWARD

Residential Address: 2405 Gun Shed

~~SAN ANTONIO~~ TX 78234
Fort Sam Houston

Physical Address of Employer:

2405 Gun Shed

~~SAN ANTONIO~~ TX 78234
FORT SAM HOUSTON

Board of Trustees Location Applying For: JBSA, FT SAM HOUSTON

I hereby make a formal application for the above indicated Board of Trustees. In doing so, I confirm that:

- I am qualified under the general school laws of Texas and live or am employed on JBSA.
- I attest the contents of my resume.
- I am a qualified voter.
- I willingly accept the appointment to the Board of Trustees and will serve in this capacity with full adherence to the state established standards on the duties and responsibilities of school board members.

Signature of Applicant

WHITE, WILLIE E

Printed Name of Applicant

6 MAY 21

Date

Digital Signatures are authorized. If using a wet signature, please sign, date and print legibly. Form must be completed prior to setting up your interview with the selection board.

WILLIE E WHITE

G-5 Plans & Strategy Management Analyst

Security Clearance :Active Secret

30% or More Disabled Veterans YES

Email: willie8241@sbcglobal.net

WK: willie.e.white1.civ@mail.mil

HM: 10207 Ivy Jade, Schertz, TX. 78154

C: 210-834-5043 / W: 210-466-0145

Headquarters IMCOM, San Antonio TX.78234

Areas of Expertise:

President, School Board & District Governance, Approver of School district Annual Budgeting and Fiscal Management, Extensive Communication Senior Executive/General Officer level , Organizational Management, Advocate for Educational Excellence, Human Resource, Civilian Recruiting, Effective Business Communication, Employee Management, Administration and Management Strategic Planning, Skill in Use of Military Personnel Systems Operational Management, Planning and Evaluating, Practice Roberts Rule of Order, Hiring Executive School District Superintendents

EDUCATION:

Masters of Business Administration: (MBA)

“University of Phoenix”, San Antonio, TX.

Graduated - 2014

Bachelor of Science in Management; (BSM)

“University of Phoenix”, San Antonio, TX.

Graduated - 2012

Military Education:

Graduate Army First Sergeant(Personnel Manager) Course,

Graduated - 2006

Army Drill Sergeant School,

Graduated - 2001

Advanced Non-Commissioned Officer Course,

Graduated - 2001

Basic Non-Commissioned Officer Course,

Graduated - 1994

Primary Leadership & Development Course,

Graduated - 1997

Certifications:

U.S. Bank Corporate Payment System Certified (Approving Official), 2015

Army Instructor Course -Trained to facilitate large instructional based classes, 2002

Computer Based Training Program (SHARE-POINT),2012

Contracting Officer, 2011-Present

Professional Associations

Vice President/President, Fort Sam Houston ISD Board of Trustees, 2018 – Present

Regional Vice President, Texas Caucus of Black School Board Members, 2018 - Present

WILLIE E WHITE

Management (CIM) operating budget.

Prepared and briefed the Quarterly Training Budget to Deputy Commanding General and assisted in setting the yearly Programming and Budgeting for the CIM and HQ IMCOM Military Training Specific Allotment, TDY, CIM Operational Expense.

Primary Travel Coordinator for Non Appropriated Fund organization; processed six courses for over 125 students TDY travel in a seven-month period, streamlined a work process improvement to ensure accurate and timely submissions of funding request for garrison reimbursements.

Military Training Specific Allotment (MTSA) Program Manager for IMCOM garrisons; allocated funding for over 70 service members with a \$1.6M Budget.

Travel financial reimbursement manager 12-15 courses per year totaling \$400K-500K and 150-180 students.

May/2010 to Nov/2014: HQ, IMCOM Business Training Coordinator Community Recreation - Supervisor: Daryl Harris, daryl.w.harris.naf@mail.mil: 40 hrs week

Responsible for coordinating senior leader's attendance to developmental training for career advancement.

Managed an operating budget of \$3.5 million as a Contract Officer Representative for Penn State University and Booze Allen Hamilton; developed programs for methods improvement, workforce design, mission functions, and work process streamlining and contract revision.

Accounted 100% for and invoiced 8,000 pieces of equipment valued over \$40 million in 23 shipments to Iraq and Afghanistan.

Negotiated with Region Directors manages and oversee the daily operation of the command's primary conferences to include Conus Europe, Pacific, to support the Army Wounded Warrior Course consisting of 120 Joint Services personnel to attend Penn State University.

Performed contract surveillance and recommended acceptance/rejection of contractor material, services; coordinated between the contractor and the contracting office progress or problems associated with various contract requirements.

Aug/2009 to Jun/2011: Moral Welfare Recreation Command, Human Resource Management Intern Program, Supervisor: Daryl Harris, daryl.w.harris.naf@mail.mil 40 hrs week.

Lead analyst accountable for recruitment, hiring practices resume evaluations, and managing the placement of 30 newly hired enterprise Management Interns and Developmental Chefs overseeing a \$1M budget.

Mentored the Management Interns through constant communication on workforce development, training, and management development for a rotation of 60 Interns over a two year period with extensive employee Management Relations Program understanding.

Lead MWR Analyst, for conducting highly complex training support studies, analysis, and current tasking's/operations integration requirements accounting for over 60 Interns receiving 100% mandatory OPM management courses, conferences and training events.

An extensive knowledge of concepts, theories, principles, processes, and practices of human resources program and of trends or current developments associated with the program.

Implemented systematic processes and checks reduced administrative time/process for creating 65 Permanent Duty Orders for relocation of newly hired employees with over 95% success rate. Maintains comprehensive and thorough knowledge of laws, regulations, and Executive Orders.



Joint Base San Antonio Statement of Eligibility

Applicant Full Name: Deborah E. Seabron

Residential Address: 2080 Wilson Way, Bldg 247

JBSA-Fort Sam Houston Texas 78234

Physical Address of Employer:

2080 Wilson Way, Bldg 247

JBSA-Fort Sam Houston Texas 78234

Board of Trustees Location Applying For: Fort Sam Houston ISD

I hereby make a formal application for the above indicated Board of Trustees. In doing so, I confirm that:

- I am qualified under the general school laws of Texas and live or am employed on JBSA.
- I attest the contents of my resume.
- I am a qualified voter.
- I willingly accept the appointment to the Board of Trustees and will serve in this capacity with full adherence to the state established standards on the duties and responsibilities of school board members.

SEABRON.DEBORAH. Digitally signed by
E.1046982572 SEABRON.DEBORAH.E.1046982572
Date: 2021.06.03 11:31:46 -05'00'

Signature of Applicant

Deborah E. Seabron

Printed Name of Applicant

03 June 2021

Date

***Digital Signatures are authorized. If using a wet signature, please sign, date and print legibly.
Form must be completed prior to setting up your interview with the selection board.***

DEBORAH ELAINE (GRANT) SEABRON, PhD.

Email: deborah.e.seabron.civ@mail.mil

PERSONAL SUMMARY

Fort Sam Houston ISD Board Trustee 2004-2015, 2017-Present

More than 46 Years of Experience in Military Comptroller, Auditing, & Professional Management Fields

SCHOOL BOARD & PROFESSIONAL PROFILE

- Member Fort Sam Houston School Board of Trustees 2004-2015
- Elected Board Secretary 2007-2009, 2017, Board President 2009-2010, Board Vice President 2018-Present
- Director Region 20, Position D, Texas Association of School Boards (TASB) 2013-2015
- Delegate to TASA/TASB Conference Dallas, Texas 2005-2006, 2008, 2009, 2012, 2018
- Board Representative to National Association of Federally Impacted Schools (NAFIS) 2004-2010
- Board Representative FSHISD meeting National Legislative Officials Washington, DC 2004-2012
- Member Bexar County Alliance of School Boards 2006-2015, 2017-Present
- Member Texas Caucus of Black School Board Members 2007-2015, 2017-Present
- Completed approx. 490 School Board Continuing Training Hours
- FSHISD Rep (Lobbyist to Congress) - National Association of Federally Impacted Schools (NAFIS) 2005-2015, 2018
- Representative for San Antonio Area Grass Roots Legislation Advisory Council (LAC) 2008-2009, 2017
- Graduate -Texas Association of School Board's (TASB) Leadership Program 2009
- Graduate- Leadership San Antonio 1991

PROFESSIONAL ACCOMPLISHMENTS

- Field Research *"Authentic Leadership & Factors Affecting Organizational Commitment Among Professionals"* 2018
- San Antonio Women's Chamber of Commerce *"Rising Star Award"*, 2017
- Commissioner, (District 2) San Antonio Mayor's Commission for the Status of Women, 2007-2015
- Keynote Speaker, HQ, IMCOM Black History Program 2011
- Member, San Antonio Mayor's Women's Speaker's Bureau, 2007-2015
- Member, Eastside Promise Neighborhood Speaker's Bureau
- Guest Lecturer, Our Lady of the Lake, Heart and Soul Series, 2011
- Published Article - *"Military & Military City USA Combine to Make 2005 BRAC Recommendations a Reality"*, U.S. Army Journal of Installation Management (BRAC Edition) 2011
- Lead Professor, National Graduate School, Texas Bachelor's Program, Professor Master Program
- Commissioner, VIA Intra-City Rail & Streetcar Commission, 2009-2011
- FSH Representative for San Antonio 20/20 Project- Education Subcommittee 2010 -2011
- FSH Representative to San Antonio Military Task Force - Education Subcommittee 2008-2010
- Army Civilian Leadership Advanced Course, Fort Belvoir, VA 2008
- Graduate - Leadership San Antonio - Class of 1991

ACADEMIC CREDENTIALS

- PhD. - Dissertation Pending, *"Authentic Leadership & the Factors Affecting Organizational Commitment Among Professionals"*, Leadership Studies Department, Our Lady of the Lake University, San Antonio, Texas
- M.S. - Quality Systems Management, National Graduate School, Falmouth, Massachusetts
- B.A. - Accounting, University of the Incarnate Word, San Antonio, Texas

PROFESSIONAL PROFILE

502 ABW, CVM	Senior Program Manager	2021 - Present
• 502 ABW, XP	Chief, JBSA Basing & Reintegration Programs	2019 - 2021
• 502ABW,XP	Chief, JBSA Wellness & Prevention Programs	2017-2018
• 502 ABW, XP/8 Integrations	Chief, Integrations/Strategic Initiatives	2015 -2017
• 502 MSG, JBSA - FSH, TX	Chief, Commander's Action Group	2010-2015
• Fort Sam Houston, TX	Chief, Plans, Analysis & Integration	2009- 2010
• Fort Sam Houston, TX	Lead, Management Analysis Branch, PAID	2004- 2009



Joint Base San Antonio Statement of Eligibility

Applicant Full Name: *Andrea De londa Nicholas*

Residential Address: *7327 Roveen Trail
San Antonio, Texas 78244*

Physical Address of Employer:
*2530 Funston Rd (B2530)
Fort Sam Houston, Tx 78234*

Board of Trustees Location Applying For:

I hereby make a formal application for the above indicated Board of Trustees. In doing so, I confirm that:

- I am qualified under the general school laws of Texas and live or am employed on JBSA.
- I attest the contents of my resume.
- I am a qualified voter.
- I willingly accept the appointment to the Board of Trustees and will serve in this capacity with full adherence to the state established standards on the duties and responsibilities of school board members.

Andrea Nicholas

Signature of Applicant

8 Jun 21

Date

Andrea Nicholas

Printed Name of Applicant

**Digital Signatures are authorized. If using a wet signature, please sign, date and print legibly.
Form must be completed prior to setting up your interview with the selection board.**

Andrea D. Nicholas

7327 Roveen Trail, San Antonio, Texas 78244 Telephone: 210-367-1065
andreadnicholas@hotmail.com

PROFESSIONAL SUMMARY

Passionate Robert G. Cole alumna committed to making the educational experience a positive one for all students, faculty and staff. Prepared to support decisions/initiatives that will enhance the district's climate so that all students, faculty and staff may obtain the knowledge, skills and abilities necessary to thrive in all aspects (cognitive, physical, social, and emotional) of their lives at school and in the community. Eager to share 32 years of experiences obtained while working for JBSA-Child and Youth Programs and give back to the district that provided the foundation I needed as a student to be successful. Desires to secure a position as a member of the Fort Sam Houston Independent School District Board of Trustees.

SKILLS

Positive Atmosphere Promoter
Leadership/Communication
Active Listening
Operation Analysis/Monitoring

Critical Thinking
Fast Learner
Proficient in Microsoft Office
Adaptive

Strategic Planning and Thinking
Multitasking
Child/Youth Mentor/Coaching
Teamplayer

EXPERIENCE

Jan 2019 to Present Community Child Care Coordinator, JBSA-Fort Sam Houston, Texas

Assist families with securing child care options that fulfill their needs. Recruit eligible applicants to become Family Child Care (FCC) providers. Serve as the educational advisor and resource person to each FCC provider. Serve as the FCC point of contact for the Inclusion Action Team. Provide various briefings reference Child and Youth Programs to Units, Squadrons, Key Spouses/Leaders, and/or civilian organizations. Assist families with navigating MilitaryChildCare.com. Assist families with scheduling care utilization for Respite Care and various Expanded Child Care initiatives. Monitor FCC program for compliance with AF instructions, guidelines and policies. Prepare various reports and correspondence as directed via written and/or oral instruction. Maximize patron engagements by providing operational excellence.

May 2015 to Jan 2019 Training and Curriculum Specialist, JBSA-Fort Sam Houston, Texas

Provide and/or coordinate training for Child and Youth Program staff to ensure information and guidance in child and youth development are obtained and maintained. Ensure staff members receive training in risk management (internal controls, accident/incident reporting, and child abuse identification, prevention and reporting procedures, etc.) Conduct observations of personnel during daily activities and special events to assess their competency level(s), evaluate performance and provide feedback. Complete debriefs reference staff performance. Ensure training, observations, testing, and debriefs are documented appropriately and in a timely manner. Communicate effectively with management on training and performance matters. Work with management and parents to determine if reasonable accommodations can be met for patrons identified as having a special need. Ensure staff are trained and environments support patron utilization. Plans, develops, and executes trainings to include but not limited to New Employee Orientation, New Employee Training, Training Modules, and installation requirements. Serve as an informational resource for personnel, children/youth and parents reference programming requirements, age/developmentally appropriate activities, available community resources and upcoming events. Recommend purchases for developmentally appropriate material, supplies, and equipment. Ensures environments are arranged appropriately and equipment and supplies are in good working condition and being utilized appropriately. Ensure program meets Department of Defense Certification standards and comply with all legal and regulatory requirements. Serve as Subject Matter Expert for Armed Forces Action Process as it pertains to Child and Youth Programs.

Oct 2011 to Nov 2015 Army Child Care in Your Neighborhood (ACCYN) Community Based Program Manager JBSA-Fort Sam Houston, Texas

Provide regular technical assistance and evaluations to ensure participating child development center directors, staff and family child care providers are providing care that meets the needs of its patrons and is in compliance with established National, State and ACCYN program requirements. Assess programs and develop baselines for plans and improvements through administering environment rating scales. Identify and provide training to child

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development program staff and Family Child Care providers to ensure safe, age and developmentally appropriate child care is provided. Monitor child development and family child care homes by conducting announced and unannounced site visits to ensure staff adhere to risk management procedures to meet all applicable military and State licensing regulations. Assist programs with planning an annual budget to meet the needs of the program and its patrons. Budget must include staff training and professional development, and promote positive growth and development of children/youth IAW all applicable regulations and standards. Distribute funding and reconcile financial data as it pertains to executing program budgets. Provide technical assistance/guidance to programs and families enrolling in the Fee Assistance program. Serve as a coach/mentor in assisting programs to establish an accreditation team and provide technical support and updates on program progress towards obtaining or maintaining credentials and/or national accreditation. Serve as subject matter expert and coordinate with military organizations and outside agencies to provide program materials, consultation, and training. Maintain state-of-the-art knowledge of child and youth development philosophy, principles, methods, and techniques as endorsed by the military and nationally recognized child/youth organizations. Serve as a Records Custodian for Child and Youth Programs. Recruit, support and maintain relationships with community based child care programs to provide families with child care that is commensurate in quality and cost to care being offered on post. Represent the military as a viable partner with resources to increase the quality of care in off post catchment areas which benefits all children served.

Mar 2008 to Oct 2011 Outreach Services (OS) Director, Child, Youth & School Services (CYS), JBSA-Fort Sam Houston, Texas

Provide oversight and accountability for staff performance and safety/well-being of patrons IAW policies and procedures. Supervise and evaluate staff according to established performance standards. Provide professional recognition and/or disciplinary action. Ensure staff follow risk management procedures and standard operating procedures to support program goals. Implement and monitor policies reference fees, patron eligibility, baseline programming, space allocations, etc. Prepare operating procedures to anticipate installation trends and documents in Installation Child and Youth Operations Plan. Apply professional knowledge to plan, and implement OS components via Parent Liaison Services, Community Liaison Services, and CYS Liaison Services, Outreach Care and Supervision Options, and Mobile programs. Provide staff training and development. Process personnel actions in a timely manner. Conduct analysis of annual program budget variances and prepare written justification for funding of program resource requirements.

EDUCATION

Wayland Baptist University- San Antonio, Texas, Med, 2021

Wayland Baptist University- San Antonio, Texas, BSOE, Management, 2007

St Philip's College- San Antonio, Texas, AA, Liberal Arts (Education), 2004

St Philip's College- San Antonio, Texas, AAS, Computer Information Sys-Acct Specialist, 1990

TRAINING

Over 50 hours of Texas Association of School Administrators/Texas Association of School Boards training, Lean Six Sigma Black Belt (Organizational Efficiency), Resiliency Training Facilitator, Basic Management Course - MWR Academy, Operation Excellence Customer Service Trainer, Galileo Leadership Training, Managing Multiple Projects, Alpine Tower Teambuilding, Parents as Teachers-Heroes at Home, Ethics, Action Skills for Supervisors and Effective Teams (ASSETS), Teamwork and Motivation, Effective Writing, Working with Not Against Parents, Customer Service, and various Military Child Education Coalition Trainings

AFFILIATIONS

2017-present #TeamAction Help Raise 1 Help Save 1 - Mentor

2012-present SayTown Snappers - Vice President

2004-present San Antonio Blazers Premier Track Club- Fundraiser Member

1990-present National Youth Sports Coach Association – Coach

1990-present JBSA-Fort Sam Houston Youth Sports - Cheer Coordinator and Coach

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REFERENCES

Roxanne Lacy 210-860-4811

Rex Murphy 210-324-1447

Approval of Applicability of State Statute to Special Purpose School Districts

November 19, 2021

COMMITTEE ON SCHOOL INITIATIVES: ACTION STATE BOARD OF EDUCATION: CONSENT

SUMMARY: This item provides an opportunity for the committee and board to consider and approve an updated list by section of the Texas Education Code (TEC), Title I and Title II, and recommendations regarding which sections of the code should apply or not apply to the operations of Texas Tech University K-12 and The University of Texas at Austin High School.

STATUTORY AUTHORITY: Texas Education Code (TEC), §11.351.

TEC, §11.351 permits the State Board of Education (SBOE) on the recommendation of the commissioner and after consulting with the school districts involved and obtaining the approval of a majority of those districts in each affected county in which a proposed school district is located, to establish a special-purpose school district for the education of students in special situations whose educational needs are not adequately met by regular school districts. The SBOE is permitted to impose duties or limitations on the school district as necessary for the special purpose of the district.

The SBOE is required to grant to the districts the right to share in the available school fund apportionment and other privileges as are granted to independent and common school districts.

The full text of statutory citations can be found in the statutory authority section of this agenda.

BACKGROUND INFORMATION AND JUSTIFICATION: This item provides an opportunity for the board to consider and approve an updated list by section of the Texas Education Code (TEC), Title I and Title II, and recommendations regarding which sections of the code should apply or not apply to the operations of Texas Tech University K-12 and The University of Texas at Austin High School.

In September 2020, the SBOE adopted 19 TAC §61.101 to outline applicability of state law for special purpose school districts. Section 61.101(k) requires each special purpose school district to submit to the SBOE by September 1 of each odd-numbered year an updated list by section of the TEC, Title I and Title II, with recommendations regarding which sections of the code should apply or not apply to the operations of its schools. The submission must compare the recommendations to the list last provided to the SBOE.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve the recommendations from Texas Tech University K-12 and The University of Texas at Austin High School regarding sections of the Texas Education Code that should apply or not apply to the operations of their special purpose districts.

Staff Member Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services

Separate Exhibit:

Recommendations from Texas Tech University K-12 and The University of Texas at Austin High School regarding sections of the Texas Education Code that should apply or not apply to the operations of their special purpose districts.

(to be provided at the November 2021 SBOE meeting)

Approval of Required School Safety Training for District Trustees

November 19, 2021

COMMITTEE ON SCHOOL INITIATIVES: ACTION

STATE BOARD OF EDUCATION: ACTION

SUMMARY: House Bill 690, passed by the 87th Texas Legislature, Regular Session, 2021, requires the State Board of Education (SBOE) to require a trustee to complete training on school safety. The SBOE, in coordination with the Texas School Safety Center, must develop the curriculum and materials for the training. This item provides an opportunity for the board to approve the school safety training curriculum developed by the Texas School Safety Center.

STATUTORY AUTHORITY: Texas Education Code (TEC), §11.159(b-1), as amended by HB 690, 87th Texas Legislature, Regular Session, 2021.

TEC, §11.159(b-1), requires the SBOE to require a trustee to complete training on school safety. The SBOE, in coordination with the Texas School Safety Center, must develop the curriculum and materials for the training.

The full text of statutory citations can be found in the statutory authority section of this agenda.

BACKGROUND INFORMATION AND JUSTIFICATION: This item provides an opportunity for the board to approve an outline of the school safety training curriculum developed by the Texas School Safety Center. HB 690 requires that the training materials be approved by January 1, 2022.

The SBOE has adopted continuing education requirements for school board members in 19 TAC Chapter 61, Subchapter A. Following approval of the curriculum and materials, a proposed amendment to 19 TAC §61.101 to add the school safety training requirement will be presented to the board for consideration at a future meeting. At the September 2021 meeting, the Texas School Safety Center presented an outline for the proposed curriculum to the committee. Following the September 2021 meeting, the SBOE chair appointed an ad hoc committee to work with the Texas School Safety Center on the curriculum in advance of the November 2021 meetings.

MOTION TO BE CONSIDERED: The State Board of Education:

Approve the school safety training curriculum and materials developed by the Texas School Safety Center.

Staff Member Responsible:

Monica Martinez, Associate Commissioner, Standards and Support Services

**Discussion of Proposed Amendment to 19 TAC Chapter 61, School Districts,
Subchapter A, Board of Trustees Relationship**

November 18, 2021

**COMMITTEE ON SCHOOL INITIATIVES: DISCUSSION
STATE BOARD OF EDUCATION: NO ACTION**

SUMMARY: This item provides an opportunity for the committee to discuss a proposed amendment to 19 Texas Administrative Code (TAC) Chapter 61, School Districts, Subchapter A, Board of Trustees Relationship. The proposed amendment would reflect changes made by House Bill (HB) 690, 87th Texas Legislature, Regular Session, 2021, to the State Board of Education's (SBOE's) duty to provide training courses for independent school district trustees.

STATUTORY AUTHORITY: Texas Education Code (TEC), [§11.159\(b-1\)](#), as added by HB 690, 87th Texas Legislature, Regular Session, 2021.

TEC, [§11.159\(b-1\)](#), as added by HB 690, 87th Texas Legislature, Regular Session, 2021, obligates the SBOE to require trustees to complete training on school safety. The SBOE, in coordination with the Texas School Safety Center, must develop the curriculum and materials for the training by January 1, 2022.

The full text of statutory citations can be found in the statutory authority section of this agenda.

FUTURE ACTION EXPECTED: The proposed amendment to Chapter 61, Subchapter A, will be presented for first reading and filing authorization at the January 2022 SBOE meeting.

BACKGROUND INFORMATION AND JUSTIFICATION: TEC, [§11.159](#), Member Training and Orientation, requires the SBOE to provide a training course for school board trustees. Chapter 61, Subchapter A, addresses this statutory requirement. School board trustee training under current SBOE rule includes a local school district orientation session, a basic orientation to the TEC, an annual team-building session with the local school board and the superintendent, specified hours of continuing education based on identified needs, training on evaluating student academic performance, and training on identifying and reporting potential victims of sexual abuse, human trafficking, and other maltreatment of children.

HB 690, 87th Texas Legislature, Regular Session, 2021, added new TEC, [§11.159\(b-1\)](#), which obligates the SBOE to require trustees to complete training on school safety. The proposed amendment to Chapter 61, Subchapter A, would codify the school safety training requirement in rule.

New TEC, [§11.159\(b-1\)](#), also requires that the SBOE, in coordination with the Texas School Safety Center, develop the curriculum and materials for the training by January 1, 2022. At the September 2021 SBOE meeting, the board discussed an outline of the school safety training curriculum proposed by the Texas School Safety Center and provided feedback on the outline. In order to meet the January 1, 2022 statutory deadline, the training curriculum and materials will be submitted to the SBOE for review and final approval at its November 2021 meeting.

Staff Members Responsible:

Jeff Cottrill, Deputy Commissioner, Governance and Accountability

Christopher Lucas, Director, Policy, Planning, and Operations, Governance and Accountability

Review of Proposed Amendments to 19 TAC Chapter 229, Accountability System for Educator Preparation Programs

November 19, 2021

COMMITTEE ON SCHOOL INITIATIVES: ACTION
STATE BOARD OF EDUCATION: ACTION

SUMMARY: This item provides the State Board of Education (SBOE) an opportunity to review the State Board for Educator Certification (SBEC) rule actions that would propose amendments to 19 Texas Administrative Code (TAC) Chapter 229, Accountability System for Educator Preparation Programs. Chapter 229 establishes the performance standards and procedures for educator preparation program (EPP) accountability. The proposed amendments would provide for adjustments to the 2020–2021 *Accountability System for Educator Preparation (ASEP) Manual* due to the ongoing public health situation; implement House Bill (HB) 159, 87th Texas Legislature, Regular Session, 2021, to add students with disabilities to the student achievement ASEP performance indicator regarding student performance; provide additional clarity for certificate category calculations; and provide updates to the *ASEP Manual*.

STATUTORY AUTHORITY: The statutory authority for 19 TAC Chapter 229 is the Texas Education Code (TEC), §§21.041(a), (b)(1), and (d); 21.043(b) and (c), 21.0441(c) and (d); 21.0443; 21.045, as amended by HB 159, 87th Texas Legislature, Regular Session, 2021; 21.0451; and 21.0452.

TEC, §21.041(a), allows the SBEC to adopt rules as necessary for its own procedures.

TEC, §21.041(b)(1), requires the SBEC to propose rules that provide for the regulation of educators and the general administration of TEC, Chapter 21, Subchapter B, in a manner consistent with TEC, Chapter 21, Subchapter B.

TEC, §21.041(d), states that the SBEC may adopt a fee for the approval and renewal of approval of an educator preparation program, for the addition of a certificate or field of certification, and to provide for the administrative cost of appropriately ensuring the accountability of EPPs.

TEC, §21.043(b) and (c), require SBEC to provide EPPs with data, as determined in coordination with stakeholders, based on information reported through the Public Education Information Management System (PEIMS) that enables an EPP to assess the impact of the program and revise the program as needed to improve.

TEC, §21.0441(c) and (d), require the SBEC to adopt rules setting certain admission requirements for EPPs.

TEC, §21.0443, states that the SBEC shall propose rules to establish standards to govern the approval or renewal of approval of EPPs and certification fields authorized to be offered by an EPP. To be eligible for approval or renewal of approval, an EPP must adequately prepare candidates for educator certification and meet the standards and requirements of the SBEC. The SBEC shall require that each EPP be reviewed for renewal of approval at least every five years. The SBEC shall adopt an evaluation process to be used in reviewing an EPP for renewal of approval.

TEC, §21.045, as amended by HB 159, 87th Texas Legislature, Regular Session, 2021, states that the SBEC shall propose rules establishing standards to govern the approval and continuing accountability of all EPPs.

TEC, §21.0451, states that the SBEC shall propose rules for the sanction of EPPs that do not meet accountability standards and shall annually review the accreditation status of each EPP. The costs of technical assistance required under TEC, §21.0451(a)(2)(A), or the costs associated with the appointment of a monitor under TEC, §21.0451(a)(2)(C), shall be paid by the sponsor of the EPP.

TEC, §21.0452, states that to assist persons interested in obtaining teaching certification in selecting an EPP and to assist school districts in making staffing decisions, the SBEC shall make certain specified information regarding EPPs in this state available to the public through the SBEC's Internet website.

The full text of statutory citations can be found in the statutory authority section of this agenda.

PREVIOUS BOARD ACTION: None.

BACKGROUND INFORMATION AND JUSTIFICATION: EPPs are entrusted to prepare educators for success in the classroom. The TEC, §21.0443, requires EPPs to adequately prepare candidates for certification. Similarly, TEC, §21.031, requires the SBEC to ensure candidates for certification demonstrate the knowledge and skills necessary to improve the performance of the diverse student population of this state. TEC, §21.045, also requires the SBEC to establish standards to govern the continuing accountability of all EPPs. The SBEC rules in 19 TAC Chapter 229 establish the process used for issuing annual accreditation ratings for all EPPs to comply with these provisions of the TEC and to ensure the highest level of educator preparation, which is codified in the SBEC Mission Statement.

At the April 2021 meeting, Texas Education Agency (TEA) staff presented draft rule text and received direction from the SBEC related to potential rule changes in Chapter 229. The SBEC directed staff to receive additional feedback on certificate category pass rates. Staff hosted a meeting with the Educator Preparation Advisory Committee (EPAC) on May 21, 2021, to receive feedback on the proposed text.

Following is a description of the topics for the proposed amendments to 19 TAC Chapter 229. The proposed amendments to 19 TAC Chapter 229 are presented in Attachment I. The updated Figure: 19 TAC §229.1(c), which is the *ASEP Manual*, is presented in Attachment II. A detailed description is included below.

§229.1. General Provisions and Purpose of Accountability System for Educator Preparation Programs.

Update of *ASEP Manual*:

The proposed amendment to Figure: 19 TAC §229.1(c) would update the *ASEP Manual* to do four things:

Updates to Chapter 3 would include language to exclude candidates issued a probationary certificate under the condition of the waiver issued by the governor. These candidates are removed from the calculation per 19 TAC §229.4(a)(1)(D), therefore, this update clarifies this removal in the *ASEP Manual*. Chapter 3 would also be updated to align with the pass rate approach for the 2020–2021 academic year (AY), per 19 TAC §229.4(a)(1)(B). This update aligns the *ASEP Manual* with existing rule language. Chapter 3 would further be updated with clarification about the Core Subjects Adjustment, which is no longer needed due to changes in how data is reported to TEA but is still used for historic data. A new section, Disaggregation at the Certification or Category Level, would be added to the *ASEP Manual*, providing clarity on the calculations for proposed new 19 TAC §229.5(c). These changes were prompted by feedback from the SBEC and stakeholders, as noted in the description of changes to 19 TAC §229.5(c) below. The old section, The Disaggregation at the Test Level, would be removed. Finally, updates to the

worked examples would be made, removing old examples and providing new ones, to align with the text updates. The updates include a new example pertaining to 19 TAC §229.5(c).

Updates to Chapter 5 would implement HB 159, 87th Texas Legislature, Regular Session, 2021, to clarify that all students, including students with disabilities, would be used in the calculation of the standard.

Updates to Chapter 8 would provide the new focus area for the Innovative EPP commendation. This focus area was approved by the EPP commendation committee at its meeting on April 29, 2021.

Updates to Chapter 9 would remove the date reference to streamline the text.

Updates throughout the *ASEP Manual* would correct date references and correct minor technical errors as well as provide transparency to the field as to the calculations used to determine accreditation statuses.

§229.4. Determination of Accreditation Status.

The proposed amendment in §229.4(a) would prescribe that due to the governor's ongoing disaster declaration, the 2020–2021 AY data for the performance indicators would be reported to EPPs but not be used for accountability purposes. Given that the governor declared a disaster during which many campuses, facilities, and services were closed, impacting the ability of EPPs to meet these accountability measures, this amendment would prevent EPPs from receiving accountability ratings based on data that are partial or incomplete.

Determination of Accreditation Status:

The proposed amendment to §229.4(b), (b)(1), and (b)(2) would delay the implementation of the previously adopted index system. This would continue to provide a year in which the recommended accreditation status would be the more favorable outcome of the index system described in the §229.4(b)(1)(A)–(D) or the existing system in §229.4(b)(2)(A)–(D) for each EPP. This would align with the previous approach to the implementation timeline as being the year immediately following the end of the *Not Rated: Declared State of Disaster* accreditation status.

The proposed amendment to §229.4(b)(4) would extend the accreditation status of *Not Rated: Declared State of Disaster* to the 2020–2021 reporting year for all EPPs. This status is based on the governor's declaration of disaster on March 13, 2020, due to COVID-19. This status would limit the continued impact of test center closures and local education agency (LEA) closures on EPP accreditation statuses. The proposed amendment to §229.4(b)(4) would prescribe that the ASEP status that each EPP was assigned by the SBEC for the 2018–2019 reporting year would be the operative accreditation status for purposes prescribed in 19 TAC Chapter 228, Requirements for Educator Preparation Programs, for 2019–2020 and 2020–2021 AYs.

Proposed new §229.4(b)(4)(D) would prescribe that EPPs that were not assigned an ASEP status of *Accredited* for the 2018–2019 AY and meet the requirements to be assigned an ASEP status of *Accredited* for the 2020–2021 AY, as described in §229.4(b)(1)(A) or (2)(A), would provide for a break in consecutively measured years or next most recent years as prescribed in §229.4(b)(1)–(3), and would allow an EPP to be eligible for commendations as described in §229.1(d). Proposed new §229.4(b)(4)(D) would allow an EPP that has made program improvements during the pandemic that would have resulted in an *Accredited* status if ASEP was not paused to break from the 2018–2019 ASEP status for purposes of determining future ASEP accreditation status based on consecutive years of poor performance and be eligible for a commendation.

Technical edits would be made to §229.4(a) to apply Texas Register style requirements.

§229.5. Accreditation Sanctions and Procedures.

The proposed amendment to §229.5(c) would clarify that the determination of pass rates evaluated at the level of a certification class or category is calculated at the exam level, and that all exams required for certification, as listed in Figure: 19 TAC §230.21(e), are included. This amendment would require EPPs to meet the performance standard for all non-PPR exams required for certification within a certification class or category. This aligns with the requirements for candidates to be certified.

At the May 21, 2021 meeting of the EPAC, there was discussion about the update to §229.5(c). Stakeholders noted the importance of using all tests available and ensuring specifically that results from the Science of Teaching Reading (STR) exam were able to be used. The group discussed a number of options, including combining pass rates and having each pass rate count separately. Stakeholders also noted that candidates are required to pass all exams for certification and that expectations for EPPs should be aligned. Proposed amendments in §229.5(c) and Chapter 3 of the *ASEP Manual* would provide for this alignment.

Proposed new §229.5(c)(3) would prescribe that EPPs that failed to meet the performance standard in subsection (c) regarding performance on a certification examination in the 2018–2019 academic year and would meet the requirements for the 2020–2021 AY will provide a break in consecutively measured years for that class or category for the purposes of determining future consecutive years of poor performance. This would allow an EPP that has made program improvements in a certificate class or category that would have resulted in a reset if the calculation was not paused to break from the 2018–2019 consecutively measured years.

The proposed amendment in §229.5(c) would provide technical edits to renumber and reletter subsections (d) and (e) to paragraphs (1) and (2) and subsections (f) and (g) to subsections (d) and (e).

SBOE Review of Proposed SBEC Rules

Under the TEC, §21.042, the SBEC must submit a written copy of each rule it proposes to adopt to the SBOE for review. The SBOE may reject the proposed rule by a vote of at least two-thirds of the members of the SBOE present and voting but may not modify a rule.

FISCAL IMPACT: No changes have been made to this section since published as proposed. The TEA staff has determined that there is no additional fiscal impact on state or local governments and that there are no additional costs to entities required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: No changes have been made to this section since published as proposed. The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code (TGC), §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: No changes have been made to this section since published as proposed. The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis, specified in TGC, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: No changes have been made to this section since published as proposed. The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to TGC, §2001.0045.

TAKINGS IMPACT ASSESSMENT: No changes have been made to this section since published as proposed. The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under TGC, §2007.043.

GOVERNMENT GROWTH IMPACT: No changes have been made to this section since published as proposed. The TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would limit an existing regulation by removing accountability requirements for EPPs for the 2020–2021 academic year due to the ongoing disaster declaration. EPPs will not be held accountable for performance metrics during this time as outlined in this proposed rule.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not create a new regulation; would not expand or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: No changes have been made to this section since published as proposed. The public benefit anticipated as a result of the proposal would be an accountability system that informs the public of the quality of educator preparation provided by each SBEC-approved EPP. There is no anticipated cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: No changes have been made to this section since published as proposed. The proposal would have no new data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: No changes have been made to this section since published as proposed. The TEA staff has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: In accordance with the SBEC rulemaking process, a summary of comments received by the SBEC on its proposed rules is shared with the SBOE under separate cover prior to this SBOE meeting.

MOTION TO BE CONSIDERED: The State Board of Education:

Take no action on proposed amendments to 19 TAC Chapter 229, Accountability System for Educator Preparation Programs.

Staff Members Responsible:

Emily Garcia, Associate Commissioner, Educator Preparation, Certification, and Enforcement
Mark Olofson, Director, Educator Data, Research, and Strategy

Attachment I:

Text of Proposed Amendments to 19 TAC Chapter 229, Accountability System for Educator Preparation Programs

Attachment II:

Text of Proposed Figure 19 TAC §229.1(c)

ATTACHMENT I
Text of Proposed Amendments to 19 TAC

Chapter 229. Accountability System for Educator Preparation Programs

§229.1. General Provisions and Purpose of Accountability System for Educator Preparation Programs.

- (a) The State Board for Educator Certification (SBEC) is responsible for establishing standards to govern the continuing accountability of all educator preparation programs (EPPs). The rules adopted by the SBEC in this chapter govern the accreditation of each EPP that prepares individuals for educator certification. No candidate shall be recommended for any Texas educator certification class or category except by an EPP that has been approved by the SBEC pursuant to Chapter 228 of this title (relating to Requirements for Educator Preparation Programs) and is accredited as required by this chapter.
- (b) The purpose of the accountability system for educator preparation is to assure that each EPP is held accountable for the readiness for certification of candidates completing the programs.
- (c) The relevant criteria, formulas, calculations, and performance standards relevant to subsection (d) of this section and §229.4 of this title (relating to Determination of Accreditation Status) are prescribed in the *Texas Accountability System for Educator Preparation (ASEP) Manual* provided as a figure in this subsection.

Figure: 19 TAC §229.1(c) [~~Figure: 19 TAC §229.1(c)~~]

- (d) An accredited EPP that is not under an active SBEC order or otherwise sanctioned by the SBEC may receive commendations for success in the following four dimensions identified by the SBEC and prescribed in the figure in subsection (c) of this section:
 - (1) Rigorous and Robust Preparation;
 - (2) Preparing the Educators Texas Needs;
 - (3) Preparing Educators for Long-Term Success; and
 - (4) Innovative Educator Preparation.

§229.4. Determination of Accreditation Status.

- (a) Accountability performance indicators. The State Board for Educator Certification (SBEC) shall determine the accreditation status of an educator preparation program (EPP) at least annually, based on the following accountability performance indicators, disaggregated by demographic group and other requirements of this chapter and determined with the formulas and calculations included in the figure provided in §229.1(c) of this title (relating to General Provisions and Purpose of Accountability System for Educator Preparation Programs). Data will be used only if the following indicators were included in the accountability system for that academic year. Except for the 2019-2020 and 2020-2021 academic years [~~year~~], when the data described in paragraphs (1)-(5) of this subsection will be reported to EPPs and will not be used to determine accreditation statuses, EPP accreditation statuses shall be based on:
 - (1) the EPP candidates' performance on examinations of pedagogy and professional responsibilities (PPR) and non-PPR standard certification examinations. The EPP candidates' performance on PPR and non-PPR examinations shall provide separate accountability performance indicators for EPPs ;
[ε]
 - (A) For both PPR and non-PPR examinations, the performance standard shall be calculated based on the percentage of individuals admitted after December 26, 2016, who passed an examination within the first two attempts. For purposes of determining the pass rate, an individual shall not be excluded because the individual has not been recommended for a standard certificate. The pass rate is based solely on the examinations approved by the EPP and required to obtain initial certification in the class or category for which the individual serves his or her internship, clinical teaching, or practicum. Examinations not required for certification in that class or category, whether taken before or after admission

to an EPP, are not included in the rate. The formula for calculation of pass rate is the number of individuals who have passed an examination on their first or second attempt, including any attempts after the candidate completed the EPP, divided by the number of individuals who passed an examination on their first attempt plus those who passed or failed on their second attempt.

- (B) For the 2020-2021 academic year and following, the performance standard shall be the percent of individuals admitted after December 26, 2016, who passed an examination within the first two attempts, including those examinations attempted after the individual has completed the EPP or when the EPP has not recommended the individual for a standard certificate. The pass rate is based solely on the examinations approved by the EPP. Examinations taken before admission to the EPP or specific examinations taken for pilot purposes are not included in the pass rate. Completers who have been issued a probationary certificate under a waiver issued by the governor pursuant to the declaration of disaster on March 13, 2020, are not included in the pass rate for the 2020-2021 academic year.
 - (C) For examinations of PPR, the pass rate will be calculated as described in subparagraph (A) of this paragraph for the 2018-2019 and 2019-2020 academic years and subparagraph (B) of this paragraph beginning with the 2020-2021 academic year. The performance standard shall be a pass rate of 85%.
 - (D) For non-PPR examinations, the pass rate will be calculated as described in subparagraph (A) of this paragraph for the 2018-2019 and 2019-2020 academic years and subparagraph (B) of this paragraph beginning with the 2020-2021 academic year. The performance standard shall be a pass rate of 75%.
- (2) the results of appraisals of first-year teachers by administrators, based on a survey in a form to be approved by the SBEC. The performance standard shall be 70% of first-year teachers from the EPP who are appraised as "sufficiently prepared" or "well prepared []";
 - (3) the growth of students taught by beginning teachers as indicated by the STAAR Progress Measure, determined at the student level as described in Figure: 19 TAC §97.1001(b) of Part II of this title (relating to Accountability Rating System), and aggregated at the teacher level as described in Figure: 19 TAC §229.1(c) of this title [~~relating to General Provisions and Purpose of Accountability System for Educator Preparation Programs~~]. The performance standard shall be 70% of beginning teachers from the EPP reaching the individual performance threshold. The first two academic years for which the Texas Education Agency (TEA) has data necessary to calculate this performance standard following the 2019-2020 academic year will be reporting years only and will not be used to determine accreditation status;
 - (4) the results of data collections establishing EPP compliance with SBEC requirements specified in §228.35(g) of this title (relating to Preparation Program Coursework and/or Training), regarding the frequency, duration, and quality of field supervision to candidates completing clinical teaching or an internship. The frequency and duration of field supervision shall provide one accountability performance indicator, and the quality of field supervision shall provide a separate accountability performance indicator; []
 - (A) The performance standard as to the frequency, duration, and required documentation of field supervision shall be that the EPP meets the requirements of documentation of §228.35(g) of this title for 95% of the EPP's candidates.
 - (B) The performance standard for quality shall be 90% of candidates rating the field supervision as "frequently" or "always or almost always" providing the components of structural guidance and ongoing support; and
 - (5) the results from a teacher satisfaction survey, in a form approved by the SBEC, of new teachers administered at the end of the first year of teaching under a standard certificate. The performance standard shall be 70% of teachers responding that they were "sufficiently prepared" or "well prepared" by their EPP.

- (b) Accreditation status assignment. For the 2021-2022 [~~2020-2021~~] academic year, the assigned accreditation status shall be the better result for the EPP from the system described in paragraph (1) of this subsection and paragraph (2) of this subsection.
- (1) Beginning in the 2021-2022 [~~2020-2021~~] academic year, all approved EPPs may be assigned an accreditation status based on their performance in the Accountability System for Educator Preparation Programs (ASEP) Index system, as described in Figure: 19 TAC §229.1(c) of this title.
- (A) Accredited status. An EPP shall be assigned an Accredited status if the EPP has met the standard of 85% of the possible points in the ASEP Index system as described in Figure: 19 TAC §229.1(c) of this title and has been approved by the SBEC to prepare, train, and recommend candidates for certification.
- (B) Accredited-Not Rated status. An EPP shall be assigned Accredited-Not Rated status upon initial approval to offer educator preparation, until the EPP can be assigned a status based on the ASEP Index system as described in Figure: 19 TAC §229.1(c) of this title. An EPP is fully accredited and may recommend candidates for certification while it is in Accredited-Not Rated status.
- (C) Accredited-Warned status.
- (i) An EPP shall be assigned Accredited-Warned status if the EPP accumulates 80% or greater but less than 85% of the possible points in the ASEP Index system as described in Figure: 19 TAC §229.1(c) of this title.
- (ii) An EPP may be assigned Accredited-Warned status if the SBEC determines that the EPP has violated SBEC rules, orders, and/or Texas Education Code (TEC), Chapter 21.
- (D) Accredited-Probation status.
- (i) An EPP shall be assigned Accredited-Probation status if the EPP accumulates less than 80% of the possible points in the ASEP Index system as described in Figure: 19 TAC §229.1(c) of this title.
- (ii) An EPP may be assigned Accredited-Probation status if the SBEC determines that the EPP has violated SBEC rules, orders, and/or TEC, Chapter 21.
- (2) Through the 2021-2022 [~~2020-2021~~] academic year, all approved EPPs may be assigned an accreditation status as follows.
- (A) Accredited status. An EPP shall be assigned an Accredited status if the EPP has met the accountability performance standards described in subsection (a) of this section and has been approved by the SBEC to prepare, train, and recommend candidates for certification.
- (B) Accredited-Not Rated status. An EPP shall be assigned Accredited-Not Rated status upon initial approval to offer educator preparation, until the EPP can be assigned a status based on the performance standards described in subsection (a) of this section. An EPP is fully accredited and may recommend candidates for certification while it is in Accredited-Not Rated status.
- (C) Accredited-Warned Status.
- (i) An EPP shall be assigned Accredited-Warned status if the EPP:
- (I) fails to meet the performance standards set by the SBEC for the overall performance of all its candidates on any of the indicators set forth in subsection (a) of this section in any one year;
- (II) fails to meet the performance standards in two demographic groups on an indicator set forth in subsection (a) of this section in any one year; or

- (III) fails to meet the performance standards for a demographic group on any of the indicators set forth in subsection (a) of this section for two consecutively measured years, regardless of whether the deficiency is in the same demographic group or standard.
 - (ii) An EPP may be assigned Accredited-Warned status if the SBEC determines that the EPP has violated SBEC rules, orders, and/or TEC, Chapter 21.
- (D) Accredited-Probation status.
 - (i) An EPP shall be assigned Accredited-Probation status if the EPP:
 - (I) fails to meet the performance standards set by the SBEC for the overall performance of all its candidates on any of the indicators set forth in subsection (a) of this section for two consecutively measured years;
 - (II) fails to meet the performance standards in three demographic groups on an indicator set forth in subsection (a) of this section in any one year; or
 - (III) fails to meet the performance standards for a demographic group on any of the indicators set forth in subsection (a) of this section for three consecutively measured years, regardless of whether the deficiency is in the same demographic group or standard.
 - (ii) An EPP may be assigned Accredited-Probation status if the SBEC determines that the EPP has violated SBEC rules, orders, and/or TEC, Chapter 21.
- (3) Not Accredited-Revoked status.
 - (A) An EPP shall be assigned Not Accredited-Revoked status and its approval to recommend candidates for educator certification revoked if it is assigned Accredited-Probation status for three consecutively measured years.
 - (B) An EPP may be assigned Not Accredited-Revoked status if the EPP has been on Accredited-Probation status for one year, and the SBEC determines that revoking the EPP's approval is reasonably necessary to achieve the purposes of the TEC, §21.045 and §21.0451.
 - (C) An EPP may be assigned Not Accredited-Revoked status if the EPP fails to pay the required ASEP technology fee by the deadline set by TEA as prescribed in §229.9(7) of this title (relating to Fees for Educator Preparation Program Approval and Accountability).
 - (D) An assignment of Not Accredited-Revoked status and revocation of EPP approval to recommend candidates for educator certification is subject to the requirements of notice, record review, and appeal as described in this chapter.
 - (E) A revocation of an EPP approval shall be effective for a period of two years, after which a program may reapply for approval as a new EPP pursuant to Chapter 228 of this title (relating to Requirements for Educator Preparation Programs).
 - (F) Upon revocation of EPP approval, the EPP may not admit new candidates for educator certification but may complete the training of candidates already admitted by the EPP and recommend them for certification. If necessary, TEA staff and other EPPs shall cooperate to assist the previously admitted candidates of the revoked EPP to complete their training.
- (4) Not Rated: Declared State of Disaster status.
 - (A) Due to the governor's declaration of disaster on March 13, 2020 , in accordance with Texas Government Code, §418.014, all EPPs shall be assigned a status of Not Rated: Declared State of Disaster for the 2019-2020 and 2020-2021 academic years [year] .
 - (B) The assignment of Not Rated: Declared State of Disaster shall not interrupt consecutively measured years or next most recent prior years as prescribed in this chapter. The

assignment of Not Rated: Declared State of Disaster shall not be included in any count of years prescribed in this chapter.

(C) For the purposes of §228.10 of this title (relating to Approval Process), §228.17(c) of this title (relating to Change of Ownership and Name Change), and §228.20 of this title (relating to Governance of Educator Preparation Programs), the status the SBEC assigned an EPP for the 2018-2019 academic year shall be the operative accreditation status.

(D) For EPPs with an assigned status other than Accredited for the 2018-2019 academic year that meet the requirements for a status of Accredited as described in subsection (b)(1)(A) or (b)(2)(A) of this section based on their 2020-2021 data:

(i) the 2020-2021 academic year shall represent a break in consecutively measured years or next most recent prior years as prescribed in subsection (b)(1)-(3) of this section; and

(ii) the EPP shall be eligible for commendations as described in §229.1(d) of this title for the 2020-2021 academic year.

(c) Small group exception.

(1) For purposes of accreditation status determination, the performance of an EPP candidate group, aggregated or disaggregated by demographic group, shall be measured against performance standards described in this chapter in any one year in which the number of individuals in the group exceeds 10. The small group exception does not apply to compliance with the frequency and duration of field supervisor observations.

(2) For an EPP candidate group, aggregated or disaggregated by demographic group, where the group contains 10 or fewer individuals, the group's performance shall not be counted for purposes of accreditation status determination for that academic year based on only that year's group performance.

(3) If the current year's EPP candidate group, aggregated or disaggregated by demographic group, contained between one and 10 individuals, that group performance shall be combined with the next most recent prior year's group performance for which there was at least one individual, and if the two-year cumulated group contains more than 10 individuals, then the two-year cumulated group performance must be measured against the standards in the current year.

(4) If the two-year cumulated EPP candidate group, aggregated or disaggregated by demographic group, contains between one and 10 individuals, then the two-year cumulated group performance shall be combined with the next most recent group performance for which there was at least one individual. The three-year cumulated group performance must be measured against the standards in the current year, regardless of how small the cumulated number of group members may be.

(5) In any reporting year in which the EPP candidate group, aggregated or disaggregated by demographic group, does not meet the necessary number of individuals needed to measure against performance standards for that year, for all indicators, the accreditation status will continue from the prior year. Any sanction assigned as a result of an accredited-warned or accredited-probation status in a prior year will continue if that candidate group has not met performance standards since being assigned accredited-warned or accredited-probation status. The SBEC may modify the sanction as the SBEC deems necessary based on subsequent performance, even though that performance is not measured against performance standards for a rating.

§229.5. Accreditation Sanctions and Procedures.

(a) The State Board for Educator Certification (SBEC) may assign an educator preparation program (EPP) Accredited-Warned or Accredited-Probation status if the SBEC determines that the EPP has violated SBEC rules and/or Texas Education Code, Chapter 21.

(b) If an EPP has been assigned Accredited-Warned or Accredited-Probation status, or if the SBEC determines that additional action is a necessary condition for the continuing approval of an EPP to recommend

candidates for educator certification, the SBEC may take any one or more of the following actions, which shall be reviewed by the SBEC at least annually:

- (1) require the EPP to obtain technical assistance approved by the Texas Education Agency (TEA) or SBEC;
 - (2) require the EPP to obtain professional services approved by the TEA or SBEC;
 - (3) appoint a monitor to participate in the activities of the EPP and report the activities to the TEA or SBEC; and/or
 - (4) require the EPP to develop an action plan addressing the deficiencies and describing the steps the program will take to improve the performance of its candidates. TEA staff may prescribe the information that must be included in the action plan. The action plan must be sent to TEA staff no later than 45 calendar days following notification to the EPP that SBEC has ordered the action plan.
- (c) Notwithstanding the accreditation status of an EPP, if the performance of candidates on an examination required for certification (as listed in Figure: 19 TAC §230.21(e) of this title (relating to Educator Assessment)) in an individual certification class or category offered by an EPP fails to meet the performance standard on the non-PPR examinations as described in §229.4(a)(1)(D) of this title (relating to Determination of Accreditation Status) for three consecutive years, the approval to offer that certification class or category shall be revoked. Any candidates already admitted for preparation in that class or category may continue in the EPP and be recommended for certification after program completion, but no new candidates shall be admitted for preparation in that class or category unless and until the SBEC reinstates approval for the EPP to offer that certification class or category.
- (1) ~~(d)~~ For purposes of determining compliance with subsection (c) of this section, candidate performance in individual certification classes or categories in only the 2016-2017 academic year and subsequent academic years will be considered.
 - (2) ~~(e)~~ Performance indicators by demographic group shall not be counted for purposes of subsection (c) of this section pertaining to performance standards for individual certification classes or categories. If the aggregated number of individuals counted for a certification class or category is 10 or fewer, the performance on the standard shall be cumulated and counted in the same manner as provided in §229.4(c) of this title.
 - (3) For EPPs that failed to meet the standard described in subsection (c) of this section for a certification class or category in the 2018-2019 academic year that meet the requirements based on their 2020-2021 data, the 2020-2021 academic year shall represent a break in consecutively measured years for the purpose of subsection (c) of this section.
- (d) ~~(f)~~ An EPP shall be notified in writing regarding any action proposed to be taken pursuant to this section, or proposed assignment of an accreditation status of Accredited-Warning, Accredited-Probation, or Not Accredited-Revoked. The notice shall state the basis on which the proposed action is to be taken or the proposed assignment of the accreditation status is to be made.
- (e) ~~(g)~~ All costs associated with providing or requiring technical assistance, professional services, or the appointment of a monitor pursuant to this section shall be paid by the EPP to which the services are provided or required, or its sponsor.

ATTACHMENT II

19 TAC Figure §229.1(c)

Figure: 19 TAC §229.1(c)

**Texas Accountability System for Educator
Preparation (ASEP) Manual
2020–2021 [~~2019–2020~~]**

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Chapter 1 – Accountability Overview

The Accountability System for Educator Preparation Programs (ASEP) was the result of state legislation¹ that implemented an accountability framework for educator preparation programs (EPPs) and provided information for EPPs, policymakers, and the public. ASEP provides information about the performance of EPPs and establishes accountability measures related to EPP processes and outcomes. Within this legislation, The State Board for Educator Certification (SBEC) was charged with establishing rules² governing ASEP. Key provisions of the governing legislation and rules include:

- Establishing minimum standards for initial and continuing approval of EPPs
- Establishing sanctions for EPPs that do not meet standards
- Requiring annual reporting of performance data for each EPP
- Providing publicly available consumer information to support individuals in selection of EPPs and school districts in making recruitment and staffing decisions

About This Manual

This manual provides descriptions and examples of the analyses and calculations used in calculating the values for the ASEP indicators for accreditation. These analytical approaches will be used to compute ASEP values based on 2020–2021 [~~2019–2020~~] data. This manual is designed to be adopted into rule by the SBEC. To this end, it has been condensed from prior iterations to focus solely on those indicators and calculations for the ASEP accreditation indicators.

This manual begins with an overview of ASEP and accreditation, followed by methodological considerations that apply across the system (Chapter 2). Chapters 3–7 elaborate on each individual ASEP indicator and include an explanation of the analysis along with an example. Chapter 8 presents information about the recognition of high-performing EPPs. Chapter 9 describes the determination of accreditation statuses using the ASEP Index.

ASEP Accountability Indicators

ASEP accountability indicators are used to determine accreditation status of EPPs. These indicators are described in Texas Education Code (TEC) §21.045 and enacted in rule in Texas Administrative Code (TAC) Chapter 229. TEC statute identifies five measures, which TAC rule further delineates into seven separate indicators:

- ASEP Accountability Indicator 1a: Certification examination results for pedagogy and professional responsibilities (PPR) exams
- ASEP Accountability Indicator 1b: Certification examination results for non-PPR exams
- ASEP Accountability Indicator 2: Principal appraisal of the preparation of first-year teachers
- ASEP Accountability Indicator 3: Improvement in student achievement of students taught by beginning teachers
- ASEP Accountability Indicator 4a: Frequency and duration of field observations

¹ Texas Education Code (TEC) §§21.045, 21.0451, and 20.0452.

² [Texas Administrative Code \(TAC\) \[§\] Chapter 229](#)

- ASEP Accountability Indicator 4b: Quality of field supervision
- ASEP Accountability Indicator 5: Satisfaction of new teachers

These indicators are further explained in the following chapters, including the performance standards and methods for calculations.

Chapter 2 – Methodological Considerations

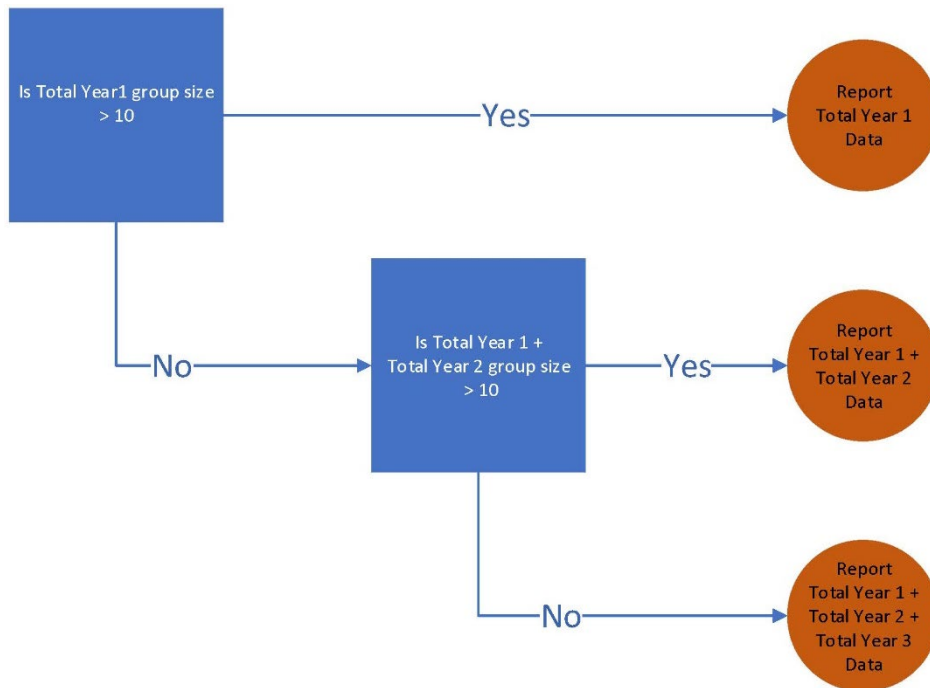
This ASEP chapter discusses methodological and reporting considerations that are relevant to ASEP accountability indicators.

Small Group Aggregation

Per 19 TAC §229.4(c), selected ASEP accountability indicators are subject to a small group consideration and aggregation. These indicators are used for accountability if groups include more than 10 individuals in an individual year or contain 10 individuals when combined with the next-most prior year for which there are data, or when combined with the two next-most prior years for which there are data.

Illustration 1 summarizes the procedure for the small group aggregation. If 10 or fewer individuals are present in a reporting group in a year, data are combined with data for the next most prior year for which there are data. If the combined (Year 1 and Year 2) group size is more than 10, then the combined group data are reported. If the combined group size is 10 or fewer, then data from the next most prior year for which there are data are combined (Year 1, Year 2, and Year 3) and the performance for the combined group is reported regardless of sample size.

Illustration 1: Overview of Small Group Aggregation Procedure



As illustrated above, use of the small group exception may result in nonreported data for ASEP for some years. Because determination of accreditation status may be based on performance across multiple years, the small group procedure allows for accreditation determinations to be based on data from nonconsecutive years, including only those years in which enough data are available.

Demographic Group Conventions

As prescribed by 19 TAC §229.4(a), ASEP accountability indicators are to be reported with disaggregation in respect to gender, race, and ethnicity. For these categories, TEA uses the race, ethnicity, and gender designations defined in 19 TAC §229.2(13).

As of this publication, Educator Certification Online System (ECOS) allows for self-identified gender designations of male and female, which are the disaggregated gender categories reported for ASEP. If no selection is made, the individual is excluded from the disaggregated performance metric calculations. However, the individual is still included in the aggregated performance metric calculations.

Per 19 TAC §229.2(13) ASEP uses these four categories for the race and ethnicity demographic group: African American, Hispanic, White, and Other. If no selection for race and ethnicity is made, the individual is excluded from the disaggregated performance metric calculations. However, the individual is still included in the aggregated performance metric calculations.

Rounding Conventions

Unless otherwise noted, to compute ASEP accountability indicators, conventional rounding rules are applied. For example, when rounding to a whole number, numbers that end with a decimal value of .4999 or less are rounded down; those that end with a decimal value of .5000 or more are rounded up. When rounding to a one-place decimal, numbers that end with .9499 round to .9, and those that end with .9500 round to 1.0.

Chapter 3 – Certification Exam Pass Rate

Overview

ASEP Indicator 1 is the pass rate on certification exams approved by the EPP. The SBEC has separated this indicator into two measures: the pass rate on PPR exams (1a) and the pass rate on non-PPR exams (1b). This chapter presents the individuals included, the assessments included, special methodological considerations, and a worked example of computing these two similar indicators.

Individuals Included

For the ~~2020–2021~~ ~~[2019–2020]~~ academic year (AY), all individuals who are enrolled in an EPP and complete an examination required for licensure are eligible for inclusion. Individuals admitted to the EPP prior to December 27, 2016, who have not exited the program and subsequently re-entered the EPP following December 26, 2016, are excluded from this calculation. Individuals who were issued a probationary certificate under a waiver issued by the governor pursuant to the declaration of disaster on March 13, 2020, are not included. For the purposes of determining the pass rate, individuals shall not be excluded because the individual has not been recommended for a standard certificate.

Assessments Included

For the ~~2020–2021~~ ~~[2019–2020]~~ AY, certification examinations approved by the EPP ~~[and required for certification in the category(ies) in which the candidate is pursuing certification]~~ are eligible for inclusion. ~~[The TEA identifies these examinations by comparing the examinations completed by the individual to the category being pursued, specified by the EPP on the finisher records list in ECOS with the category(ies) of the certificate associated with the internship active at the time of the examination, should such an internship exist.]~~

The examination must be the first or second attempt for the particular examination³ approved by the EPP for the individual. Examinations approved by the EPP and completed prior to the reporting year are used in determining the attempt-count for an individual. Results from examinations taken during the reporting year are used in the calculation of the pass rate. Examinations approved by the EPP but completed after the individual has finished the EPP are included. Examinations that are part of an exam pilot program as of the date they are approved by the EPP are excluded, both from the pass rate and from the determination of which examinations are the first two attempts.

Calculation

ASEP Accountability Indicator 1a:

Divide the number of passed PPR certification examinations on the first or second attempt by the total number of passed PPR certification examinations on the first attempt plus the number of PPR certification examinations passed or failed on their second attempt. Multiply by 100. Round to the nearest whole number.

³ Examinations are uniquely identified by test number and test type

ASEP Accountability Indicator 1b:

Divide the number of passed non-PPR certification examinations on the first or second attempt by the total number of passed non-PPR certification examinations on the first attempt plus the number of non-PPR certification examinations passed or failed on their second attempt. Multiply by 100. Round to the nearest whole number.

Special Methodological Considerations

Core Subjects Adjustment

Due to an update in how data is reported to TEA from the test vendor, the Core Subjects adjustment is no longer needed for scores reported January 2020 and following. As the adjustment is still used in years which may be included as part of a small group aggregation, the procedure is described below.

The Core Subjects examinations (i.e., 291 Core Subjects EC–6 TExES and 211 Core Subjects 4–8 TExES) allow for candidates to re-take individual subject areas if they fail the examination on their first attempt. The way in which the test vendor reports this data back to TEA necessitates a post-hoc adjustment to the pass rates related to these exams. The core subjects adjustment treats individual subject retakes as second attempts only once a) all subject areas have been passed or b) a particular subject area has been failed the second time. If all subject areas are passed without a subject area being failed the second time, TEA identifies this as a second attempt pass. If the candidate fails an individual subject area a second time, TEA identifies this as a second attempt fail.

It should be noted that if individuals take the individual subject matter exams, each attempt counts towards their 5-time test limit for the overall (i.e., 291 Core Subjects EC–6 TExES and 211 Core Subjects 4–8 TExES) exam.

[Disaggregation at the Test Level]

[EPP results are disaggregated at the individual certification exam level. The same approach to candidate and assessment identification is used in this reporting. Additionally, the TEA uses the small group aggregation procedure described in Chapter 2 for the individual exam level. Per 19 TAC §229.5(e), results within individual certification areas are not disaggregated by race, gender, or ethnicity.]

Disaggregation at the Certification Class or Category Level

As described in 19 TAC §229.5(c) the performance of candidates in individual certification classes and categories are also calculated following the same procedure used for Indicator 1b. TEA uses the small group aggregation procedure described in Chapter 2 for the individual exam level. Per 19 TAC §229.5(e), results within individual certification areas are not disaggregated by race, gender, or ethnicity.

The Science of Teaching Reading examination (STR, TExES 293) and the Bilingual Supplemental exam (BIL, TExES 164) are used for certification in multiple certification categories (see Figure: 19 TAC §230.21(e)). As guided by 19 TAC §229.5(c), the following approach is used to identify candidates with results for these exams with the applicable certification category.

For candidates who have attempted 293 or 164, identify the category the candidate is pursuing certification that requires 293 or 164. TEA associates candidates with categories by reviewing the certification category

being pursued, specified by the EPP on the finisher records list in ECOS and with the category(ies) of the certificate associated with the internship, should such an internship exist. In cases of discrepancies between the finisher records list and the internship, the certification category associated with the internship is used. If the candidate with a result for 293 or 164 cannot be associated with a certification category that requires the 293 or 164, the results for the candidate are not used in the calculation of pass rates for the purposes of 19 TAC §229.5(c).

For certification categories with multiple non-PPR exams, the pass rates are calculated independently using the procedure described in the Calculation section of this chapter. Both pass rates are evaluated against the standard in 19 TAC §229.4(a)(2). As noted in 19 TAC §229.5(c), failure to meet the performance standard for an exam required for a certification class or category results in the EPP being identified as not meeting the standard for the certification class or category. If an EPP fails to meet the standard for a certification class or category for three consecutive years, the approval to offer that certification class or category is revoked.

Small Group Aggregation and Enrollment Date

As described in Chapter 2, if individual demographic groups contain ten or fewer test individuals, the TEA adds results from the prior year for which there is data. For use in ASEP Accountability Indicators 1a and 1b, these prior-year groups continue to exclude individuals who were admitted prior to December 27, 2016. This means that the earliest available year for aggregation is AY 2016–2017.

Worked Examples

Example Calculation: Percent of Individuals Passing PPR Certification Examinations (ASEP Accountability Indicator 1a)

Step 1: Using the test approval list in ECOS, identify all individuals admitted to the EPP after December 26, 2016.

Step 2: Identify which tests to include in calculations. PPR examinations recommended by the EPP are included [~~which are necessary for the category(ies) necessary for the certificate(s) under which an individual is serving an internship and tests necessary for the category(ies) identified by the EPP on the finisher records list in ECOS are included~~]. Tests which were part of a pilot program when they were approved by the EPP and completed by the candidate are excluded.

Step 3: Retrieve PPR exam results for candidates identified in Step 1 for the examinations [~~their category(ies)~~] identified in Step 2.

Step 4: Counting chronologically, identify the attempt number associated with each exam for each candidate in each category at each EPP.

Step 5: Identify which test scores to include in calculations. For the purpose of calculating pass rate, only passes on first attempts, passes on second attempts, or failures on second attempts are included. Only first attempt passes, second attempt passes, and second attempt fails completed in the academic year are included.

ASEP Indicator 1a Example

<u>Name</u>	<u>Admission Date</u> <u>Test Date</u> <u>Test Attempt</u>	<u>Certificate Description</u> <u>Test Number / Name</u>	<u>Test Result</u>
<u>Andrea</u>	<u>1/15/2017</u>	<u>Core Subjects EC-6</u>	
<u>Andrea</u>	<u>February 2019</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Andrea</u>	<u>April 2019</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Betty</u>	<u>6/15/2017</u>	<u>Core Subjects 4-8</u>	
<u>Betty</u>	<u>October 2018</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Betty</u>	<u>December 2018</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Betty</u>	<u>February 2019</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Betty</u>	<u>April 2019</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Carlos</u>	<u>1/1/2018</u>	<u>LOTE EC-12 Spanish</u>	
<u>Carlos</u>	<u>February 2018</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Dana</u>	<u>12/15/2018</u>	<u>Physical Ed EC-12</u>	
<u>Dana</u>	<u>April 2019</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Eduardo</u>	<u>7/15/2017</u>	<u>Social Studies 8-12 & ESL Supplemental</u>	
<u>Eduardo</u>	<u>February 2019</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Faye</u>	<u>6/6/2017</u>	<u>Core Subjects EC-6</u>	
<u>Faye</u>	<u>December 2017</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Faye</u>	<u>December 2018</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Faye</u>	<u>March 2019</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Faye</u>	<u>August 2019</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Hector</u>	<u>3/15/2018</u>	<u>Core Subjects 4-8</u>	
<u>George</u>	<u>8/1/2017</u>	<u>Core Subjects EC-6</u>	
<u>George</u>	<u>December 2018</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Imogen</u>	<u>8/12/2018</u>	<u>Social Studies 7-12</u>	
<u>Imogen</u>	<u>February 2019</u>	<u>270: PPR Trade and Industrial Education 6-12</u>	<u>P</u>
<u>Jermaine</u>	<u>9/1/2017</u>	<u>Core Subjects 4-8</u>	
<u>Jermaine</u>	<u>December 2018</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Ken</u>	<u>6/1/2019</u>	<u>Math 7-12</u>	
<u>Lawrence</u>	<u>9/12/2018</u>	<u>Core Subjects 4-8 & Bilingual Supplemental- Spanish</u>	
<u>Lawrence</u>	<u>December 2018</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Mel</u>	<u>6/22/2017</u>	<u>Social Studies 78-12</u>	
<u>Mel</u>	<u>Sept. 2018</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Nancy</u>	<u>12/29/2016</u>	<u>Physical Ed EC-12</u>	
<u>Nancy</u>	<u>December 2018</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Oscar</u>	<u>2/11/2017</u>	<u>LOTE Spanish EC-12</u>	
<u>Oscar</u>	<u>December 2018</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Oscar</u>	<u>February 2019</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Patrice</u>	<u>1/12/2018</u>	<u>Core Subjects EC-6 & Bilingual Supplemental- Arabic</u>	
<u>Patrice</u>	<u>June 2019</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Quinn</u>	<u>6/15/2017</u>	<u>Core Subjects EC-6 & Bilingual Supplemental- Spanish</u>	

[Exclusion example: All results that are not shaded in gray are excluded from calculations because the individual did not make a second attempt during the reporting AY or already attempted the exam twice.]

[Exclusion example: Test 270: PPR Trade and Industrial Education for Imogen is excluded because it is not required for the candidates' certification category.]

<u>Name</u>	<u>Admission Date</u> <u>Test Date</u> <u>Test</u> <u>Attempt</u>	<u>Certificate Description</u> <u>Test Number / Name</u>	<u>Test Result</u>
<u>Quinn</u>	<u>June 2018</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Quinn</u>	<u>October 2019</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Roberto</u>	<u>7/1/2017</u>	<u>Core Subjects 4-8</u>	
<u>Roberto</u>	<u>February 2018</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Roberto</u>	<u>April 2019</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Sally</u>	<u>6/15/2018</u>	<u>LOTE Spanish EC-12</u>	
<u>Sally</u>	<u>February 2019</u>	<u>160 PPR EC-12</u>	<u>P</u>

All results that are not shaded in gray are excluded from calculations because the individual has not yet made a second attempt or already attempted the exam twice.

<u>Name</u>	<u>Test Attempt</u>	<u>Test Number / Name</u>	<u>Test Result</u>
<u>Andrea</u>	<u>1</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Andrea</u>	<u>2</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Betty</u>	<u>1</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Betty</u>	<u>2</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Betty</u>	<u>3</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Betty</u>	<u>4</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Carlos</u>	<u>1</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Dana</u>	<u>1</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Eduardo</u>	<u>1</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Faye</u>	<u>1</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Faye</u>	<u>2</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Faye</u>	<u>3</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>Faye</u>	<u>4</u>	<u>160: PPR EC-12</u>	<u>F</u>
<u>George</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Imogen</u>	<u>1</u>	2110 edTPA: Elementary Education: Literacy with Mathematics Task 4	<u>P</u>
<u>Jermaine</u>	<u>1</u>	<u>160: PPR EC-12</u>	<u>P</u>
<u>Lawrence</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Mel</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Nancy</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Oscar</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Oscar</u>	<u>2</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Patrice</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Quinn</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Quinn</u>	<u>2</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Roberto</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>F</u>
<u>Roberto</u>	<u>2</u>	<u>160 PPR EC-12</u>	<u>P</u>
<u>Sally</u>	<u>1</u>	<u>160 PPR EC-12</u>	<u>P</u>

Inclusion Notes:

The results for Dana, George, Lawrence, Mel, and Nancy are not included because they failed their first attempt and have not yet completed a second attempt.

The result for Imogen is not included because edTPA is a pilot exam in the 2020–2021 reporting year.

Step 6: As necessary, perform the small group aggregation. If the aggregated group or any of the disaggregated groups contain ten or fewer individuals, perform steps 1–5 for the prior year and add those individuals to the list. See Chapter 2 of this manual for further explanation of the small group aggregation.

Step 7: Calculate the pass rate by dividing the number of eligible passed examinations on the first or second attempt (9) by the total number of eligible examinations passed on the first added to the total number of eligible examinations that were passed or failed on the second attempt (11). Multiply this value by 100. Round to the nearest whole number.

Example Pass Rate Calculation

$$\begin{aligned} &= \frac{\text{Number of tests passed on first or second attempt}}{\text{Number of tests passed on first or second attempt or failed on second attempt}} \times 100 \\ &= \\ &= \frac{9}{11} \times 100 = \\ &= 0.81818 \times 100 = \\ &= 82\% \end{aligned}$$

Example Calculation: Percent of Individuals Passing Non-PPR Certification Examinations (ASEP Accountability Indicator 1b)

Step 1: Using the test approval list in ECOS, identify all individuals admitted to the EPP after December 26, 2016.

Step 2: Identify which tests to include in calculations. Non-PPR exams recommended by the EPP are included. Tests which were part of a pilot program when they were approved by the EPP and completed by the candidate are excluded. ~~[which are necessary for the category(ies) necessary for the certificate(s) under which an individual is serving an internship and tests necessary for the category(ies) identified by the EPP on the finisher records list are included.]~~

Step 3: Retrieve non-PPR exam results for candidates identified in Step 1 for the examinations ~~[their category(ies)]~~ identified in Step 2.

Step 4: Counting chronologically, identify the attempt number associated with each exam for each candidate in each field at each EPP.

Step 5: Identify which test scores to include in calculations. For the purpose of calculating pass rate, only passes on first attempts, passes on second attempts, or failures on second attempts are included. Only first attempt passes, second attempt passes, and second attempt fails completed in the academic year are included.

ASEP Indicator 1b Example

<u>Name</u>	<u>Admission Date</u> <u>Test Date</u>	<u>Certificate Description</u> <u>Test Number / Name</u>	<u>Test Result</u>
<u>Andrea</u>	<u>1/15/2017</u>	<u>Core Subjects EC-6</u>	
<u>Andrea</u>	<u>October 2018</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>December 2018</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>February 2019</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>April 2019</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>Betty</u>	<u>6/15/2017</u>	<u>Core Subjects 4-8</u>	
<u>Betty</u>	<u>October 2018</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>
<u>Carlos</u>	<u>1/1/2018</u>	<u>LOTE Spanish EC-12</u>	
<u>Carlos</u>	<u>December 2018</u>	<u>613 LOTE Spanish EC-12</u>	<u>P</u>
<u>Dana</u>	<u>12/15/2018</u>	<u>Physical Ed EC-12</u>	
<u>Dana</u>	<u>December 2018</u>	<u>158 Physical Education EC-12</u>	<u>F</u>
<u>Dana</u>	<u>April 2019</u>	<u>158 Physical Education EC-12</u>	<u>P</u>
<u>Eduardo</u>	<u>7/15/2017</u>	<u>Social Studies 7-12 & ESL</u> <u>Supplemental</u>	
<u>Eduardo</u>	<u>December 2018</u>	<u>232 Social Studies 7-12</u>	<u>P</u>
<u>Eduardo</u>	<u>January 2019</u>	<u>154 English as a Second Language</u> <u>Supplemental</u>	<u>P</u>
<u>Faye</u>	<u>6/6/2017</u>	<u>Core Subjects EC-6</u>	
<u>Faye</u>	<u>December 2018</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Faye</u>	<u>March 2019</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Faye</u>	<u>September 2019</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>George</u>	<u>8/1/2017</u>	<u>Core Subjects EC-6</u>	
<u>George</u>	<u>September 2018</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>Hector</u>	<u>3/15/2018</u>	<u>Core Subjects 4-8</u>	
<u>Hector</u>	<u>October 2018</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>
<u>Imogen</u>	<u>8/12/2018</u>	<u>Social Studies 7-12</u>	
<u>Imogen</u>	<u>October 2018</u>	<u>232 Social Studies 7-12</u>	<u>F</u>
<u>Imogen</u>	<u>December 2018</u>	<u>232 Social Studies 7-12</u>	<u>F</u>
<u>Imogen</u>	<u>February 2019</u>	<u>232 Social Studies 7-12</u>	<u>F</u>
<u>Imogen</u>	<u>December 2018</u>	<u>233 History 7-12</u>	<u>P</u>
<u>Jermaine</u>	<u>9/1/2017</u>	<u>Core Subjects 4-8</u>	
<u>Jermaine</u>	<u>October 2018</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>
<u>Jermaine</u>	<u>February 2019</u>	<u>068 Principal</u>	<u>P</u>
<u>Ken</u>	<u>6/1/2019</u>	<u>Math 7-12</u>	
<u>Ken</u>	<u>June 2019</u>	<u>235 Math 7-12</u>	<u>P</u>
<u>Lawrence</u>	<u>9/12/2018</u>	<u>Core Subjects 4-8 & Bilingual</u> <u>Supplemental-Spanish</u>	
<u>Lawrence</u>	<u>June 2019</u>	<u>164 Bilingual Education</u> <u>Supplemental</u>	<u>P</u>
<u>Lawrence</u>	<u>October 2018</u>	<u>211 Core Subjects 4-8</u>	<u>F</u>
<u>Mel</u>	<u>6/22/2017</u>	<u>Social Studies 7-12</u>	
<u>Mel</u>	<u>June 2019</u>	<u>232 Social Studies 7-12</u>	<u>F</u>
<u>Nancy</u>	<u>12/29/2016</u>	<u>Physical Ed EC-12</u>	
<u>Nancy</u>	<u>December 2018</u>	<u>158: Physical Ed EC-12</u>	<u>F</u>
<u>Oscar</u>	<u>2/11/2017</u>	<u>LOTE Spanish EC-12</u>	
<u>Oscar</u>	<u>December 2018</u>	<u>613: LOTE Spanish EC-12</u>	<u>P</u>

[Exclusion example:
All results that are not shaded in gray are excluded from calculations because the individual did not make a second attempt during the reporting AY or already attempted the exam twice.]

<u>Name</u>	<u>Admission Date Test Date</u>	<u>Certificate Description Test Number / Name</u>	<u>Test Result</u>
<u>Patrice</u>	<u>1/12/2018</u>	<u>Core Subjects EC-6 & Bilingual Supplemental- Arabic</u>	
<u>Patrice</u>	<u>June 2019</u>	<u>164 Bilingual Education Supplemental</u>	<u>P</u>
<u>Patrice</u>	<u>October 2018</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Patrice</u>	<u>December 2018</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Patrice</u>	<u>February 2019</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>Quinn</u>	<u>6/15/2017</u>	<u>Core Subjects EC-6 & Bilingual Supplemental- Spanish</u>	
<u>Quinn</u>	<u>June 2019</u>	<u>164 Bilingual Education Supplemental</u>	<u>P</u>
<u>Quinn</u>	<u>October 2018</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>Roberto</u>	<u>4/1/2017</u>	<u>Core Subjects 4-8</u>	
<u>Roberto</u>	<u>June 2018</u>	<u>211 Core Subjects 4-8</u>	<u>F</u>
<u>Roberto</u>	<u>October 2018</u>	<u>211 Core Subjects 4-8</u>	<u>F</u>
<u>Roberto</u>	<u>December 2018</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>
<u>Sally</u>	<u>6/15/2018</u>	<u>LOTE Spanish EC-12</u>	
<u>Sally</u>	<u>December 2018</u>	<u>613 LOTE Spanish EC-12</u>	<u>F</u>

All results that are not shaded in gray are excluded from calculations because the individual has not yet made a second attempt or already attempted the exam twice.

<u>Name</u>	<u>Test Attempt</u>	<u>Test Number / Name</u>	<u>Test Result</u>
<u>Andrea</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>3</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>4</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>Betty</u>	<u>1</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>
<u>Carlos</u>	<u>1</u>	<u>613 LOTE Spanish EC-12</u>	<u>P</u>
<u>Dana</u>	<u>1</u>	<u>158 Physical Education EC-12</u>	<u>F</u>
<u>Dana</u>	<u>2</u>	<u>158 Physical Education EC-12</u>	<u>P</u>
<u>Eduardo</u>	<u>1</u>	<u>232 Social Studies 7-12</u>	<u>P</u>
<u>Eduardo</u>	<u>1</u>	<u>154 English as a Second Language Supplemental</u>	<u>P</u>
<u>Faye</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Faye</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>F</u>
<u>Faye</u>	<u>3</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>George</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>P</u>
<u>Hector</u>	<u>1</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>
<u>Imogen</u>	<u>1</u>	<u>232 Social Studies 7-12</u>	<u>F</u>
<u>Imogen</u>	<u>2</u>	<u>232 Social Studies 7-12</u>	<u>F</u>
<u>Imogen</u>	<u>3</u>	<u>232 Social Studies 7-12</u>	<u>F</u>
<u>Imogen</u>	<u>1</u>	<u>233 History 7-12</u>	<u>P</u>
<u>Jermaine</u>	<u>1</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>
<u>Ken</u>	<u>1</u>	<u>235 Math 7-12</u>	<u>P</u>
<u>Lawrence</u>	<u>1</u>	<u>164 Bilingual Education Supplemental</u>	<u>P</u>
<u>Lawrence</u>	<u>1</u>	<u>211 Core Subjects 4-8</u>	<u>P</u>

<u>Name</u>	<u>Test Attempt</u>	<u>Test Number / Name</u>	<u>Test Result</u>
<u>Mel</u>	<u>1</u>	<u>232 Social Studies 7–12</u>	<u>F</u>
<u>Nancy</u>	<u>1</u>	<u>158: Physical Ed EC–12</u>	<u>F</u>
<u>Oscar</u>	<u>1</u>	<u>613: LOTE Spanish EC–12</u>	<u>P</u>
<u>Patrice</u>	<u>1</u>	<u>164 Bilingual Education Supplemental</u>	<u>P</u>
<u>Patrice</u>	<u>1</u>	<u>291 Core Subjects EC–6</u>	<u>F</u>
<u>Patrice</u>	<u>2</u>	<u>291 Core Subjects EC–6</u>	<u>F</u>
<u>Patrice</u>	<u>3</u>	<u>291 Core Subjects EC–6</u>	<u>P</u>
<u>Quinn</u>	<u>1</u>	<u>164 Bilingual Education Supplemental</u>	<u>F</u>
<u>Quinn</u>	<u>1</u>	<u>291 Core Subjects EC–6</u>	<u>F</u>
<u>Roberto</u>	<u>1</u>	<u>211 Core Subjects 4–8</u>	<u>F</u>
<u>Roberto</u>	<u>2</u>	<u>211 Core Subjects 4–8</u>	<u>F</u>
<u>Roberto</u>	<u>3</u>	<u>211 Core Subjects 4–8</u>	<u>P</u>
<u>Sally</u>	<u>1</u>	<u>613 LOTE Spanish EC–12</u>	<u>F</u>

Inclusion Notes:

The results for Mel, Nancy, Quinn, and Sally are not included because they failed their first attempt and have not yet completed a second attempt.

Step 6: As necessary, perform the small group aggregation. If the aggregated group or any of the disaggregated groups contain ten or fewer individuals, perform steps 1–5 for the prior year and add those individuals to the list. See Chapter 2 for further explanation of the small group aggregation.

Step 7: Calculate the pass rate by dividing the number of examinations passed on their first or second attempt (14) by the total number examinations passed on the first and second attempt plus the number of failed examinations on the second attempt (19). Multiply this value by 100. Round to the nearest whole number.

Example Pass Rate Calculation

$$\begin{aligned}
 &= \frac{\text{Number of tests passed}}{\text{Number of tests completed}} \times 100 \\
 &= \\
 &= \frac{14}{19} \times 100 = \\
 &= 0.736 \times 100 = \\
 &= 73.6\%, \text{ which rounds to } 74\%
 \end{aligned}$$

Example Calculation: Percent of Individuals Passing Non-PPR Certification Examinations within a Certification Category (19 TAC §229.5(c))

Step 1: Using the test approval list in ECOS, identify all individuals admitted to the EPP after December 26, 2016.

Step 2: Identify which tests to include in calculations. For certificate categories that do not require the Science of Teaching Reading exam (STR) or the Bilingual Supplemental exam (BIL), Non-PPR exams recommended by the EPP are included. For certificate categories that require STR or BIL, exams are associated with candidates and categories as described in the Disaggregation at the Certification Class or Category Level section of this chapter.

Step 3: Retrieve non-PPR exam results for candidates identified in Step 1 for their category(ies) and examinations identified in Step 2.

Step 4: Counting chronologically, identify the attempt number associated with each exam for each candidate in each field at each EPP.

Step 5: Identify which test scores to include in calculations. For the purpose of calculating pass rate, only passes on first attempts, passes on second attempts, or failures on second attempts are included. Only first attempt passes, second attempt passes, and second attempt fails completed in the academic year are included.

STR Certificate Category (Core Subjects with STR: EC-6) Example

All results that are not shaded in gray are excluded from calculations because the individual has not yet made a second attempt or already attempted the exam twice.

<u>Name</u>	<u>Test Attempt</u>	<u>Test Number / Name</u>	<u>Cert Category Pursued by Candidate</u>	<u>Test Result</u>
<u>Andrea</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Andrea</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Betty</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Carlos</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Dana</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Dana</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Eduardo</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Eduardo</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Faye</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Faye</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Faye</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>George</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Hector</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Imogen</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Imogen</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Imogen</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Josefina</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Josefina</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>

Name	Test Attempt	Test Number / Name	Cert Category Pursued by Candidate	Test Result
<u>Josefina</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Kim</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Lance</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Manuel</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Manuel</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Nadia</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Naida</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Olga</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Olga</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Olga</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Pent</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Quentin</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Ramon</u>	<u>1</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>F</u>
<u>Ramon</u>	<u>2</u>	<u>291 Core Subjects EC-6</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Ramon</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Sienna</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>
<u>Todd</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Early Childhood: EC-3</u>	<u>P</u>
<u>Uma</u>	<u>1</u>	<u>293 Science of Teaching Reading</u>	<u>Core Subjects with STR: EC-6</u>	<u>P</u>

Inclusion Notes:

The 291 results for Dana and Olga and the 293 results for Imogen are not included because they failed their first attempt and have not yet completed a second attempt.

The 293 result for Todd is not included because he is not pursuing a different certificate category. His result would be used in the calculation for the Early Childhood: EC-3 category pass rate.

Step 6: As necessary, perform the small group aggregation. If the aggregated group or any of the disaggregated groups contain ten or fewer individuals, perform steps 1-5 for the prior year and add those individuals to the list. See Chapter 2 for further explanation of the small group aggregation.

Step 7: Calculate the pass rate for each exam by dividing the number of examinations passed on their first or second attempt (291: 16; 293: 11) by the total number examinations passed on the first and second attempt plus the number of failed examinations on the second attempt (291: 12; 293: 11). Multiply this value by 100. Round to the nearest whole number.

Example Pass Rate Calculation

$$= \frac{\text{Number of tests passed}}{\text{Number of tests completed}} \times 100$$

=

$$\frac{12}{16} \times 100 =$$

$$0.75 \times 100 =$$

75% for 291

$$\frac{11}{11} \times 100 =$$

$$1 \times 100 =$$

100% for 293

Chapter 4 – Appraisal of First-Year Teachers by Administrators

Overview

ASEP Accountability Indicator 2 is the percent of first-year teachers who are designated as *sufficiently prepared* or *well-prepared* based on survey ratings by their principals.

The principal survey is administered between early April and mid-June at the end of the relevant academic year. The survey is delivered through the ECOS. The roster of first-year teachers is determined using certification data and Public Education Information Management System (PEIMS) data. This roster is loaded into ECOS and district-level human resources staff perform roster verification, certifying that the individual is employed in the district, was employed for at least five months in the reporting period, and works at the school designated in the system.

Principals log in to ECOS to complete the survey. Within the survey, the principal verifies that the individual is teaching in the area(s) for which he or she was prepared by the EPP and that the individual was employed for at least five months in the reporting period. If the principal does not verify these two statements, the survey is not collected.

The survey application requires the completion of all questions in the four required sections of the survey. These sections are Planning, Instruction, Learning Environment, and Professional Practices & Responsibilities. Additionally, if the principal indicates that the individual worked with students with disabilities or students who are English language learners, these additional survey sections are displayed and required to be completed.

Following the end of the principal survey data collection period, the data is retrieved from ECOS, cleaned, processed, de-identified, and posted online. Additionally, EPP-specific reports are generated and delivered to EPPs and the public. The aggregated and disaggregated results are used as ASEP Accountability Indicator 2.

Individuals Included

All first-year teachers of record currently enrolled in an EPP or who finished an EPP program within the five years prior to the reporting period and taught in the Texas public school system for a minimum of five months during the reporting period are included.⁴ Teachers on standard, intern, and probationary certificates are included. Teachers who are teaching under an emergency permit are excluded.

Assessments Included

All complete surveys with valid data for teachers who meet the conditions above are included. Surveys that lack valid data on any of the four required survey sections are excluded. Data from optional sections (i.e., Students with Disabilities, English Language Learners) are included when available.

⁴ See TAC §229.2(18) for the definition of a first-year teacher

Calculation

Count the number of principal surveys for the EPP that met standard. Divide this number by the total number of completed principal surveys for the EPP. Multiply by 100. Round to the nearest whole number.

Scoring Approach

The scoring approach weights all individual categories equally. Each item is weighted by the inverse of the number of items in the subscale. Operationally, this means that the average for each subscale is calculated, and then the average of these subscale values is calculated for the final individual-level score. The individual must average a score of 2 or better, corresponding with *sufficiently prepared*.

The individual subscales and their constituent items are presented in the table below.

Individual Subscales and Constituent Items

Subscale	Number of Items	Items in ECOS Survey
Planning	12	Q4 – Q15
Instruction	13	Q16 – Q28
Learning Environment	7	Q29 – Q35
Professional Practices & Responsibilities	6	Q36 – Q41
Students with Disabilities	6	Q43 – Q48
English Language Learners	4	Q50 – Q53

Special Methodological Considerations

Optional Sections and Missing Data

As noted above, the Students with Disabilities section and English Language Learners section are only displayed if the principal indicates that the teacher worked with either or both of these populations. If the survey sections are not displayed on the survey, no data are recorded for these sections. The determination of whether or not the individual survey met standard is based only on the sections of the survey with complete data.

The survey tool does not allow for individuals completing the survey to leave questions blank. Consequentially, each individual survey will have either four, five, or six complete survey sections.

Small Group Aggregation

Per 19 TAC §229.4(c), the small group aggregation procedure as described in ASEP Manual Chapter 2 is conducted for ASEP Accountability Indicator 2. Only data from years in which ASEP Accountability Indicator 2 has been a consequential indicator are used in this aggregation. The small group aggregation procedure uses results calculated using the survey and scoring approach effective for the particular administration of the survey.

Worked Example

Example Calculation: Principal Appraisal of First-Year Teachers (ASEP Accountability Indicator 2)

Step 1: Retrieve principal survey data in ECOS.

Step 2: Average the item scores in each subsection.

Step 3: Average the subsection values.

Step 4: Identify which surveys have the minimum acceptable score or higher.

Example Survey Data and Calculation

Name ⁵	Points by Survey Section ⁶						Average by Survey Section						Overall Average	Met Standard
	PL	INS	LE	PPR	SWD	ELL	PL	INS	LE	PPR	SWD	ELL		
<i>Number of Questions</i>	12	13	7	6	6	4	12	13	7	6	6	4		
Kurt	27	28	16	16		12	2.25	2.15	2.29	2.67		3.00	2.47	Y
Salvador	26	28	18	15	14		2.17	2.15	2.57	2.50	2.33		2.35	Y
Regina	25	31	19	17	18	9	2.08	2.38	2.71	2.83	3.00	2.25	2.54	Y
Silvia	22	26	16	15	13	12	1.83	2.00	2.29	2.50	2.17	3.00	2.30	Y
Rachael	30	36	20	17	18	7	2.50	2.77	2.86	2.83	3.00	1.75	2.62	Y
Myra	29	32	19	16			2.42	2.46	2.71	2.67			2.56	Y
Darla	26	29	18	14	15	8	2.17	2.23	2.57	2.33	2.50	2.00	2.30	Y
Guadalupe	32	33	19	14	16	11	2.67	2.54	2.71	2.33	2.67	2.75	2.61	Y
George	21	24	16	13	12	6	1.75	1.85	2.29	2.17	2.00	1.50	1.92	N
Jessie	31	35	21	17	16	9	2.58	2.69	3.00	2.83	2.67	2.25	2.67	Y
Lewis	24	25	12	7	11	8	2.00	1.92	1.71	1.17	1.83	2.00	1.77	N
Ruby	26	25	16	15	16	5	2.17	1.92	2.29	2.50	2.67	1.25	2.13	Y
Josefina	33	35	20	16	17		2.75	2.69	2.86	2.67	2.83		2.76	Y
Susan	34	33	20	15	15	11	2.83	2.54	2.86	2.50	2.50	2.75	2.66	Y
Molly	28	29	18	14	15	5	2.33	2.23	2.57	2.33	2.50	1.25	2.20	Y
Sam	20	25	16	15	17	11	1.67	1.92	2.29	2.50	2.83	2.75	2.33	Y
Lucy	26	29	19	17	15	8	2.17	2.23	2.71	2.83	2.50	2.00	2.41	Y
Kevin	28	33	20	13	14		2.33	2.54	2.86	2.17	2.33		2.45	Y
Robin	29	35	19	11	13	5	2.42	2.69	2.71	1.83	2.17	1.25	2.18	Y
Mercedes	33	37	20	15	16	5	2.75	2.85	2.86	2.50	2.67	1.25	2.48	Y

Step 5: As necessary, perform the small group aggregation. If the aggregated group or any of the disaggregated groups contain ten or fewer individuals, perform Steps 1–5 for the prior year and add those individuals to the list. See Chapter 2 of the ASEP Manual for further explanation of the small group aggregation.

⁵ Public data sets do not include names.

⁶ PL = Planning; INS = Instruction; LE = Learning Environment; PPR = Professional Practices & Responsibilities; SWD = students with disabilities; ELL = English language learners. Empty cells denote missing data.

Step 6: Count the number of first-year teachers who met the criteria for being designated as *sufficiently-prepared* or *well-prepared* (18).

Step 7: Divide the number of surveys which met the criteria for being designated as *sufficiently-prepared* or *well-prepared* (18) by the total number of surveys with valid scores (20). Multiply this value by 100. Round to the nearest whole number.

$$\frac{\text{Number of surveys meeting standard}}{\text{Total number of valid surveys}} \times 100 =$$

$$\frac{18}{20} \times 100 =$$

90%

Chapter 5 – Improvement in Student Achievement of Students Taught by Beginning Teachers

Overview

ASEP Accountability Indicator 3 is the improvement of student achievement of students in the classrooms of beginning teachers. This indicator uses student data from the STAAR progress measure generated as part of the Accountability Rating System of districts, campuses, and charter schools and aggregates it to the EPP by linking the students to the beginning teachers whom have completed the EPP. Once values are determined for the beginning teachers, the value for the EPP is calculated and compared to the performance standard.

Individuals

All beginner teachers of record currently employed within a Texas public school. Beginner teachers are defined as teachers of record with three (3) or fewer consecutive years of teaching. These teachers are verified through the Public Education Information Management System (PEIMS) and through validation by local education agencies. Teachers on standard, intern, and probationary certificates are included. Teachers who are teaching under an emergency permit are excluded. Teachers who received initial teacher certification through a route other than preparation by a Texas EPP are excluded. Teachers of students with STAAR progress measures are included. Students' STAAR progress measures are associated with the corresponding teacher as contained in the assessment data.

Assessments Included

The model utilizes the STAAR progress measure for individual students, calculated as described in 19 TAC Figure: §97.1001(b). The STAAR progress measure indicates the amount of improvement or growth a student has made from year to year. For STAAR assessments (with or without accommodations), progress is measured as a student's gain score—the difference between the scaled score a student achieved in the prior year and the scaled score a student achieved in the current year. Individual student progress is then categorized as Limited, Expected, or Accelerated. If a student's STAAR progress measure is Expected, he or she met growth expectations. If the student's STAAR progress measure is Accelerated, he or she exceeded growth expectations. Currently, STAAR results for grades 4–8, English II, and Algebra I end-of-course (EOC), are utilized. Available data from all students, including students with disabilities, are used in the calculation of this measure.

Scoring Approach

The scoring approach first determines a value associated with the teacher based on the associated student STAAR progress measures. TEA then compares the teacher score to the individual standard. The individual teacher performances are then aggregated at the EPP level, and the EPP performance is determined. This EPP value is then compared with the performance standard.

Teacher level aggregation

The value for the individual teacher is generated by first taking the average of the students' progress measures for each STAAR subject area taught by that teacher and multiplied by 100. Next, we find the average of all the subject-level progress measures associated with the teacher. This value is compared to a value of 50, which corresponds with neutral student growth. If the value is 50 or greater, the individual teacher is considered to have met the individual standard.

EPP Score Determination

Following the determination of the performance standard for the individual teachers, the value for the EPP is determined. The number of teachers associated with the EPP who met the individual standard is then divided by the total number of teachers associated with the EPP in the sample and multiplied by 100 to get a percent. This is the EPP value for Indicator 3, which is compared with the performance standard.

Special Methodological Considerations

Small Group Aggregation

Per 19 TAC §229.4(c), the small group aggregation procedure as described in ASEP Manual Chapter 2 is conducted for ASEP Accountability Indicator 3. Only data from years in which ASEP Accountability Indicator 3 has been a consequential indicator are used in this aggregation. The small group aggregation procedure uses results calculated using the scoring approach effective for the year in which the values were calculated.

Worked Example

Example Calculation: Student growth of Beginning Teachers (ASEP Accountability Indicator 3)

Step 1: Identify teachers in their first three years serving as a teacher of record who were prepared for initial certification by a Texas EPP.

Step 2: Retrieve student data from Performance Reporting for students associated with the beginning teacher roster.

Step 3: Average the student progress measures for each unique combination of teacher and STAAR area

EPP Code (E)	Teacher (T)	Average Student Growth Scores (GSs)	Course (C)
123456	111	75	Math
123456	112	65	Math
123456	112	70	ELAR
123456	113	50	ELAR

Step 4: Average the values by individual teacher

Step 5: Compare individual teacher values to the individual standard score

Teacher	Teacher Growth Score	Individual Standard	Met Standard?
111	75	50	Yes
112	67.5	50	Yes
113	50	50	No
778	60	50	Yes
892	35	50	No
952	69	50	Yes
1155	73.5	50	Yes
1357	82	50	Yes
1544	58	50	Yes
1656	90	50	Yes
1959	88	50	Yes
2083	100	50	Yes
2257	51	50	Yes
2492	60	50	Yes
2926	84	50	Yes
3011	42.5	50	No
3271	69	50	Yes
3461	40	50	No
3753	71.5	50	Yes
4045	82	50	Yes
4214	64	50	Yes
4226	55	50	Yes
4267	91	50	Yes
4358	67	50	Yes
4464	26	50	No
4779	70	50	Yes
5421	58.5	50	Yes
5973	88.5	50	Yes
6404	64	50	Yes
6542	51	50	Yes
6772	50	50	No
7279	87.5	50	Yes
7849	41	50	No
7881	41	50	No
7925	81	50	Yes
8106	75	50	Yes
8341	90	50	Yes
9297	44	50	No

Step 6: Count the total number of beginning teachers with growth scores associated with the EPP (38).

Step 7: Count the total number of beginning teachers associated with the EPP who met the standard (29).

Step 8: Divide the number in Step 7 by the number in Step 6 and multiply by 100. This is the value for the EPP.

$$\frac{\text{Number of teachers meeting individual standard}}{\text{Total number of teachers with growth scores}} \times 100 =$$

$$\frac{29}{38} \times 100 =$$

76%

Chapter 6 – Frequency, Duration, and Quality of Field Supervision

Overview

ASEP Accountability Indicator 4 is the frequency, duration, and quality of field observations. The SBEC has separated this indicator into two measures: the frequency and duration of field observations (ASEP Accountability Indicator 4a) and the quality of field observations (ASEP Accountability Indicator 4b). ASEP Accountability Indicator 4a is based on data reported by EPPs into ECOS for each individual observation. ASEP Accountability Indicator 4b is based on an exit survey of teacher candidates which is administered at the time the candidates apply for their standard certificate. This section presents the individuals included, the data included, special methodological considerations, and a worked example of computing these two aligned indicators.

Individuals Included

ASEP Accountability Indicator 4a

For ASEP Accountability Indicator 4a, all individuals who completed an internship or clinical teaching appointment during the reporting period are included. In the cases where an internship or clinical teaching appointment overlaps two reporting years, the field experience is reported in the reporting year in which it ended. Individuals serving an internship are identified for the data set if they have an intern, probationary, probationary extension, or probationary second extension certificate which expires in the reporting year. Individuals completing a clinical teaching appointment are identified as being marked as a completer by the program without having held an intern, probationary, probationary extension, or probationary second extension certificate.

Individuals who have their internship certificate deactivated prior to the expiration of the certificate are removed from the data set. These deactivations must be communicated to the TEA by the EPP. Additionally, individuals who do not complete their field experience, due to extenuating circumstances or the issuance of a standard certificate prior to the conclusion of their field experience, are removed from the data set. EPPs communicate these exceptions via official letters to the TEA during the ASEP reporting period.

ASEP Accountability Indicator 4b

For ASEP Accountability Indicator 4b, all individuals who apply for an initial standard teaching license during the academic year are asked to submit surveys, which are completed in ECOS.

Data Included

ASEP Accountability Indicator 4a

All observations reported to the TEA through ECOS are used in the calculation for ASEP Accountability Indicator 4a. Observations must be reported in ECOS in the academic year during which they occurred. EPPs report the

candidate name, candidate TEA ID, field supervisor name, field supervisor TEA ID, assignment begin date, assignment end date, observation date, observation duration, assignment type, notes, and any other field required by ECOS for each observation.

ASEP Accountability Indicator 4b

All exit surveys with complete data that are submitted in the reporting year are included in the data set.

Calculation

ASEP Accountability Indicator 4a:

Divide the number of individuals who completed an internship or clinical teaching appointment in the reporting year who had the minimum number of required observations (as specified in 19 TAC §228.35(g)) by the number of individuals who completed an internship or clinical teaching appointment in the reporting year. Multiply by 100. Round to the nearest whole number.

ASEP Accountability Indicator 4b:

Count the number of surveys for the EPP that met standard. Divide this number by the total number of completed exit surveys for the EPP. Multiply by 100. Round to the nearest whole number.

Special Methodological Considerations

For ASEP Accountability Indicator 4a, results are disaggregated by race, gender, and ethnicity categories. Per 19 TAC §229.4(c)(1), the small group aggregation procedure does not apply to indicator 4a.

For ASEP Accountability Indicator 4b, the data collection mechanism does not capture race, gender, or ethnicity data. Consequentially, this indicator is reported only at the aggregated level. The small group aggregation procedure does apply to ASEP Indicator 4b.

Worked Examples

Example Calculation: Frequency and Duration of Internship and Clinical Teaching Field Observations (ASEP Accountability Indicator 4a)

Step 1: Identify all individuals completing an internship between September 1 and August 31 of the reporting year. These individuals are those who have an intern, probationary, probationary extension, or probationary second extension certificate which expired in the reporting year.

Step 2: Identify all individuals completing clinical teaching between September 1 and August 31 of the reporting year. These individuals are those who were marked as a completer by the program without having held an intern, probationary, probationary extension, or probationary second extension certificate.

Step 3: Combine the individuals from Steps 1 and 2. Remove any accepted exceptions reported to the TEA during the annual reporting period using the supplied form.

Step 4: Retrieve all field observations reported to the TEA which occurred during the internships or clinical teaching experiences in the data set resulting from Step 3.

Step 5: Count the number of observations of at least the duration specified in 19 TAC §228.35(g), for each candidate.

Example Observation Data

Name	Certificate / Assignment Type	Visit_Hours ⁷
Carmen Adams	Intern	0:56
Carmen Adams	Intern	1:02
Carmen Adams	Intern	0:45
Carmen Adams	Intern	1:12
Carmen Adams	Intern	0:46
Christina Boyd	Intern	0:57
Marjorie Brock	Clinical Teaching	0:50
Marjorie Brock	Clinical Teaching	1:14
Marjorie Brock	Clinical Teaching	1:02
Marjorie Brock	Clinical Teaching	1:02
Marjorie Brock	Clinical Teaching	1:09
Dora Cain	Intern	0:47
Dora Cain	Intern	0:51
Dora Cain	Intern	0:40
Dora Cain	Intern	1:00
Dianne Cannon	Clinical Teaching	1:13
Dianne Cannon	Clinical Teaching	0:38
Dianne Cannon	Clinical Teaching	0:53
Dianne Cannon	Clinical Teaching	0:47
Dianne Cannon	Clinical Teaching	1:01
Billie Daniels	Probationary	1:15
Billie Daniels	Probationary	0:58
Billie Daniels	Probationary	0:54
Madeline Doyle	Clinical Teaching	1:10
Madeline Doyle	Clinical Teaching	0:55
Madeline Doyle	Clinical Teaching	0:46
Jaime Fowler	Intern	0:59
Jaime Fowler	Intern	1:07
Jaime Fowler	Intern	1:01
Jaime Fowler	Intern	1:00
Jaime Fowler	Intern	0:49
Chad Frazier	Clinical Teaching	0:46
Chad Frazier	Clinical Teaching	0:55
Chad Frazier	Clinical Teaching	1:11
Chad Frazier	Clinical Teaching	1:25
Jean Hawkins	Probationary Ex	0:58
Jean Hawkins	Probationary Ex	0:50
Jean Hawkins	Probationary Ex	1:00

Exclusion example:
The observation of Dora Cain and Dianne Cannon are not counted because these observations were less than the requirement in 19 TAC §228.35(g).

⁷ This column indicates the duration of the observation.

Name	Certificate / Assignment Type	Visit_Hours ⁷
Jean Hawkins	Probationary Ex	0:59
Grace Hoffman	Clinical Teaching	0:52
Grace Hoffman	Clinical Teaching	0:59
Grace Hoffman	Clinical Teaching	0:59
Doris Hunter	Probationary	1:03
Doris Hunter	Probationary	1:19
Doris Hunter	Probationary	0:45
Melba Jensen	Clinical Teaching	0:46
Melba Jensen	Clinical Teaching	0:53
Melba Jensen	Clinical Teaching	1:01
Edmund Kennedy	Intern	1:20
Edmund Kennedy	Intern	0:58
Edmund Kennedy	Intern	0:50
Edmund Kennedy	Intern	0:59
Edmund Kennedy	Intern	0:57
Neil Newton	Clinical Teaching	0:55
Neil Newton	Clinical Teaching	1:47
Neil Newton	Clinical Teaching	0:51
Neil Newton	Clinical Teaching	1:05
Neil Newton	Clinical Teaching	1:02
Elsie Pearson	Probationary	1:15
Elsie Pearson	Probationary	1:01
Elsie Pearson	Probationary	0:55
Christopher Ray	Clinical Teaching	0:58
Christopher Ray	Clinical Teaching	0:52
Christopher Ray	Clinical Teaching	0:47
Christopher Ray	Clinical Teaching	0:59
Christopher Ray	Clinical Teaching	0:46
Charlie Schultz	Intern	0:58
Charlie Schultz	Intern	0:45
Charlie Schultz	Intern	0:53
Charlie Schultz	Intern	0:52
Charlie Schultz	Intern	1:23
Duane Soto	Clinical Teaching	1:17
Duane Soto	Clinical Teaching	0:59
Duane Soto	Clinical Teaching	0:53
Duane Soto	Clinical Teaching	0:46
Duane Soto	Clinical Teaching	0:48
Duane Soto	Clinical Teaching	0:55
Penny Sutton	Clinical Teaching	0:59
Marty Wood	Clinical Teaching (28 week)	0:49
Marty Wood	Clinical Teaching (28 week)	0:45
Marty Wood	Clinical Teaching (28 week)	0:57
Marty Wood	Clinical Teaching (28 week)	1:25
Marty Wood	Clinical Teaching (28 week)	1:15
Marty Wood	Clinical Teaching (28 week)	1:25

Step 6: Identify candidates and interns who meet the minimum requirement of the number of observations required in 19 TAC §228.35(g).

Example Data Summary

Name	Pre-Certification Teaching Experience	Number of 45-Minute Field Observations	Meet Minimum Requirement?
Marjorie Brock	Clinical Teaching	5	Y
Dianne Cannon	Clinical Teaching	5	Y
Madeline Doyle	Clinical Teaching	3	N
Chad Frazier	Clinical Teaching	4	N
Grace Hoffman	Clinical Teaching	3	N
Melba Jensen	Clinical Teaching	3	N
Neil Newton	Clinical Teaching	5	Y
Christopher Ray	Clinical Teaching	5	Y
Duane Soto	Clinical Teaching	6	Y
Marty Wood	Clinical Teaching	6	Y
Penny Sutton	Clinical Teaching	1	N
Carmen Adams	Intern	5	Y
Cristina Boyd	Intern	1	N
Dora Cain	Intern	3	N
Billie Daniels	Probationary	3	Y
Jaime Fowler	Intern	5	Y
Jean Hawkins	Probationary Ex	4	Y
Doris Hunter	Probationary	3	Y
Edmund Kennedy	Intern	5	Y
Elsie Pearson	Probationary	3	Y
Charlie Schultz	Intern	5	Y

Calculation Rule: Penny only had one qualifying observation. She is identified as a candidate for whom the minimum requirement was not met.

Calculation Rule: Cristina had only one qualifying observation. She is identified as a candidate for whom the minimum requirement was not met.

Step 7: Divide the number of candidates who received at least the minimum field observations required by 19 TAC §228.35(g) (14) by the total number of candidates who completed clinical teaching (21).

$$\frac{\text{Number of candidates who met minimum requirement}}{\text{Number of candidates with field experiences}} \times 100 =$$

$$\frac{14}{21} \times 100 = 66.67\%, \text{ which rounds to } 67\%$$

Example Calculation: Quality of Field Supervision (ASEP Indicator 4b)

Step 1: Access the Exit Survey results completed by candidates between September 1 and August 31 of the academic year. These results are recorded without personally identifiable information.

Step 2: Identify which candidate scores were within acceptable values for their field supervision rating. Candidates rate their field experience on 11 survey items (items 39–45, 47–50) on the Exit Survey using a 4-point scale where 4 = *Rarely*; 3 = *Occasionally*; 2 = *Frequently*; and 1 = *Always/Almost Always*. To meet the standard of *frequently* or *always/almost always* providing the components of structural guidance and ongoing support provision of high-quality field supervision (see 19 TAC §229.4(a)(4)(B)), responses to the applicable items must sum to equal or less than 22 points ($11 \times 2 = 22$), corresponding with an average score of 2 or less across survey items.

Example Data

Name	Total Points	Within Acceptable Values
Candidate 1	21	Y
Candidate 2	20	Y
Candidate 3	23	N
Candidate 4	19	Y
Candidate 5	18	Y
Candidate 6	18	Y
Candidate 7	17	Y
Candidate 8	14	Y
Candidate 9	19	Y
Candidate 10	25	N
Candidate 11	23	N
Candidate 12	18	Y
Candidate 13	14	Y
Candidate 14	14	Y
Candidate 15	28	N
Candidate 16	19	Y
Candidate 17	26	N
Candidate 18	13	Y
Candidate 19	19	Y
Candidate 20	13	Y
Candidate 21	16	Y
Candidate 22	18	Y
Candidate 23	21	Y
Candidate 24	20	Y
Candidate 25	33	N
Candidate 26	40	N
Candidate 27	26	N
Candidate 28	17	Y
Candidate 29	17	Y
Candidate 30	19	Y

Step 3: Count the number of candidate scores that were within acceptable criteria (22).

Step 4: Divide the number of candidates whose scores were within the acceptable criteria (22) by the total number of candidates with scores (30). Multiply this value by 100. Round to the nearest whole number.

$$\frac{\text{Number of candidates' scores that were within acceptable values}}{\text{Total number of survey responses}} =$$

$$\frac{22}{30} \times 100 =$$

73.33%, which rounds to 73%

Chapter 7 – New Teacher Satisfaction

Overview

ASEP Accountability Indicator 5 is the percent of new teachers who indicate that they were *sufficiently-prepared or well-prepared* by their EPP, as measured on the teacher satisfaction survey.

The teacher survey is administered between the beginning of April and mid-June at the end of the relevant academic year. The survey is delivered using the Qualtrics survey platform. The sample of new teachers is determined using certification data and PEIMS data. This roster is loaded into Qualtrics and an email containing a link to the survey is sent to the teacher. New teachers verify that they are completing their first year of teaching while holding a standard teaching certificate.

Teachers are required to complete all questions in the four required sections of the survey. Additionally, if the teacher indicates that he or she worked with students with disabilities or students who are English language learners, those additional sections are displayed and are required to be completed by the teacher.

Following the close of the teacher survey data collection period, the data is retrieved from Qualtrics, cleaned, processed, de-identified, and posted online. The aggregated and disaggregated results are used as ASEP Accountability Indicator 5.

Individuals Included

All new teachers who finished an EPP program within the five years prior to the reporting period and are completing their first year of teaching while holding a standard certificate are included.⁸ Teachers must have taught in the Texas public school system for a minimum of five months during the reporting period as evidenced by their presence in the PEIMS employment data gathered in October of the reporting year. Only teachers with standard certificates as of the October snapshot date are included. Teachers who are teaching under an emergency permit or who were not listed as employed in the PEIMS data in the reporting period are excluded.

Assessments Included

All complete surveys with valid data for teachers who meet the conditions above are included. Surveys that lack valid data on one or more of the four required survey sections are excluded. Data from additional sections (i.e., Students with Disabilities, English Language Learners) are included when available.

Calculation

Count the number of teacher surveys for the EPP that met standard. Divide this number by the total number of completed teacher surveys for the EPP. Multiply by 100. Round to the nearest whole number.

⁸ See TAC §229.2(25) for the definition of a new teacher

Scoring Approach

The scoring approach aligns with the scoring approach for the principal survey. Each item is weighted by the inverse of the number of items in the subscale. Operationally, this means that the average for each subscale is calculated, and then the average of these subscale values is calculated for the final individual-level score. The individual must average a score of 2 or better, corresponding with *sufficiently prepared*.

The individual subscales and their constituent items are presented in the table below.

Individual Subscales and Constituent Items

Subscale	Number of Items	Items in Survey (Question #)
Planning	12	Q4 – Q15
Instruction	13	Q16 – Q28
Learning Environment	7	Q29 – Q35
Professional Practices & Responsibilities	6	Q36 – Q41
Students with Disabilities	6	Q43 – Q48
English Language Learners	4	Q50 – Q53

Special Methodological Considerations

Optional Sections and Missing Data

As noted above, Students with Disabilities section and English Language Learners section are only displayed if the teacher indicates that he or she worked with either or both of these populations. If the survey sections are not displayed on the survey, no data are recorded for these sections. The determination of whether or not the individual survey met standard is based only on the sections of the survey with complete data.

The survey tool does not allow for individuals completing the survey to leave questions blank. Consequentially, each individual survey will have either 4, 5, or 6 complete survey sections.

Small Group Aggregation

Per 19 TAC §229.4(c), the small group aggregation procedure as described in ASEP Manual Chapter 2 is conducted for ASEP Accountability Indicator 5. Only data from years in which ASEP Accountability Indicator 5 has been a consequential indicator are used in this aggregation. The small group aggregation procedure uses results calculated using the survey and scoring approach effective for the particular administration of the survey.

Worked Example

Example Calculation: New Teacher Satisfaction (ASEP Accountability Indicator 5)

Step 1: Access teacher satisfaction survey results.

Step 2: Average the item scores in each subsection.

Step 3: Average the subsection values.

Step 4: Identify which surveys have the minimum acceptable score or higher.

Example Survey Data and Calculation

Name ⁹	Points by Survey Section ¹⁰						Average by Survey Section						Overall Average	Met Standard
	PL	INS	LE	PL	INS	LE	PL	INS	LE	PL	INS	LE		
<i>Number of Questions</i>	12	13			13	7	12	13	7	12	13	7		
Kurt	27	28	16	16		12	2.25	2.15	2.29	2.67		3.00	2.47	Y
Salvador	26	28	18	15	14		2.17	2.15	2.57	2.50	2.33		2.35	Y
Regina	25	31	19	17	18	9	2.08	2.38	2.71	2.83	3.00	2.25	2.54	Y
Silvia	22	26	16	15	13	12	1.83	2.00	2.29	2.50	2.17	3.00	2.30	Y
Rachael	30	36	20	17	18	7	2.50	2.77	2.86	2.83	3.00	1.75	2.62	Y
Myra	29	32	19	16			2.42	2.46	2.71	2.67			2.56	Y
Darla	26	29	18	14	15	8	2.17	2.23	2.57	2.33	2.50	2.00	2.30	N
Guadalupe	32	33	19	14	16	11	2.67	2.54	2.71	2.33	2.67	2.75	2.61	Y
George	21	24	16	13	12	6	1.75	1.85	2.29	2.17	2.00	1.50	1.92	Y
Jessie	31	35	21	17	16	9	2.58	2.69	3.00	2.83	2.67	2.25	2.67	N
Lewis	24	25	12	7	11	8	2.00	1.92	1.71	1.17	1.83	2.00	1.77	Y
Ruby	26	25	16	15	16	5	2.17	1.92	2.29	2.50	2.67	1.25	2.13	Y
Josefina	33	35	20	16	17		2.75	2.69	2.86	2.67	2.83		2.76	Y
Susan	34	33	20	15	15	11	2.83	2.54	2.86	2.50	2.50	2.75	2.66	Y
Molly	28	29	18	14	15	5	2.33	2.23	2.57	2.33	2.50	1.25	2.20	Y
Sam	20	25	16	15	17	11	1.67	1.92	2.29	2.50	2.83	2.75	2.33	Y
Lucy	26	29	19	17	15	8	2.17	2.23	2.71	2.83	2.50	2.00	2.41	Y
Kevin	28	33	20	13	14		2.33	2.54	2.86	2.17	2.33		2.45	Y
Robin	29	35	19	11	13	5	2.42	2.69	2.71	1.83	2.17	1.25	2.18	Y
Mercedes	33	37	20	15	16	5	2.75	2.85	2.86	2.50	2.67	1.25	2.48	Y

Step 5: As necessary, perform the small group aggregation. If the aggregated group or any of the disaggregated groups contain ten or fewer individuals, perform Steps 1–5 for the prior year and add those individuals to the list. See ASEP Manual Chapter 2 for further explanation of the small group aggregation.

Step 6: Count the number of surveys that met the criteria for being designated as *sufficiently-prepared* or *well-prepared* (18).

⁹ Public data sets do not include names.

¹⁰ PL = Planning; INS = Instruction; LE = Learning Environment; PPR = Professional Practices & Responsibilities; SWD = students with disabilities; ELL = English language learners. Empty cells denote missing data.

Step 7: Divide the number of surveys which met the criteria for being designated as *sufficiently-prepared* or *well-prepared* (18) by the total number of surveys with valid scores (20). Multiply this value by 100. Round to the nearest whole number.

$$\frac{\text{Number of surveys meeting standard}}{\text{Total number of valid surveys}} \times 100 =$$

$$\frac{18}{20} \times 100 =$$

90%

Chapter 8 – Educator Preparation Program Commendations

Per 19 TAC §229.1(c), an accredited EPP not under a board order or otherwise sanctioned by the SBEC may receive commendations for success in areas identified by the SBEC. The TEA worked with the SBEC and the EPP stakeholder advisory groups in 2018 to identify and refine a framework for recognition and issues related to EPP eligibility and calculations. In 2019, the SBEC established a four-part framework for recognizing high-performing EPPs. This ASEP chapter presents that framework, related performance standards or metrics, sources of data, and descriptions of relevant calculations.

High-Performing EPP Framework

The framework consists of four parts. The framework was developed to allow for the recognition of EPPs that are high-achieving in both established and emerging measurements and priorities. Dimensions consist of multiple measures. The dimensions for recognition include:

- Rigorous and Robust Preparation
- Preparing the Educators Texas Needs
- Preparing Educators for Long-Term Success
- Innovative Educator Preparation

The measures within each dimension are presented in the table below. These measures are calculated annually to reflect EPP performance in the prior academic year. The TEA conducts these calculations in conjunction with the ASEP accountability calculations and presents both sets of the results to the SBEC for approval on similar schedules. In all cases, the small group aggregation procedure as described in ASEP Manual Chapter 2 is applied to these measurements. However, if the small group aggregation is used, only programs with more than 10 individuals over the three years necessary for the calculation are eligible to receive a commendation related to the measure.

High Performing EPP Framework

Dimension	High-Performing EPP Measures	Standard
Rigorous and Robust Preparation	First test pass rate ¹¹	95% or greater
	First Test Pass rate in teacher shortage areas	95% or greater
	Principal Survey % of candidates Met Standard	95% or greater
Preparing the Educators Texas Needs	Preparing teachers in shortage areas	Top 5 EPPs
	Preparing Educators of Color	Top 5 EPPs
	Preparing Teachers for Rural Schools	Top 5 EPPs
Preparing Educators for Long-Term Success	Teacher Retention as a Texas public school teacher for 5 years	95% or greater
	Educator Retention as a Texas public school professional for 5 years	95% or greater
	Principal Employment in Principal or Assistant Principal Role within 3 years	75% or greater
Innovative Educator Preparation	Approved by the SBEC per EPP petition	

¹¹ EPPs are only eligible for this commendation if the differences between pass rates of different demographic groups are less than 10 percentage points

Rigorous and Robust Preparation

This dimension of high-performance uses the same data as the ASEP accountability indicators. The first measure is the overall pass rate for a candidate's first attempt on exams. All exams, including PPR and non-PPR exams, are pooled for this measure. Following ASEP Indicator Accountability 1, only tests necessary for the certificate(s) under which an individual is serving an internship and tests necessary for the category(ies) identified by the EPP on the finisher records list in ECOS are included. The standard is set at 95% or greater. Additionally, EPPs are only eligible for this recognition if the differences in the pass rates disaggregated by race and ethnicity are 10 percentage points or smaller for all groups meeting the minimum size criterion, following small group aggregation. Groups are only included in this analysis only if they contain more than 10 candidates following the small group aggregation.

The second measure in this dimension is the first test pass rate in Texas-identified, federally designated teacher shortage subject areas. These shortage areas are identified annually and reported to the United States Department of Education. For this measure, only those subject-area exams necessary for certification in the specified categories are included. The standard is set at 95% or greater.

The third indicator in this category is EPP performance on the principal survey. Following the procedure in ASEP Manual Chapter 4, results on the principal survey are computed at the EPP level. The standard is set at 95% or more individuals being rated as “met standard.”

Preparing the Educators Texas Needs

This dimension of high-performance identifies EPPs that prepare high percentages of educators identified by the SBEC and TEA as targeted for growth. For measures in this category, the top five programs, as a percentage of their completers, are recognized. As with all high-performing recognitions, only EPPs with an accreditation status of “Accredited” are eligible for recognition. This means that fewer than five EPPs may be recognized in any of these categories. Additionally, although the small group aggregation procedure is applied, only those programs which prepare more than 10 educators in any of the specified categories or groups once three years of data are aggregated are eligible for these commendations.

The first measure in this dimension is preparation of educators in teacher shortage subject areas. This indicator identifies EPPs that specialize in the preparation of educators for Texas-identified, federally-recognized teacher shortage areas. The top five EPPs in each identified certification category are eligible to be recognized.

The second measure in this dimension recognizes EPPs that prepare the highest percentage of educators who identify as African American and Hispanic. The top five EPPs with respect to each demographic group are eligible to be recognized.

The third measure is preparation of teachers for rural schools. Using first-year employment data available in the PEIMS database and the district-level geographic designations, the TEA identifies a) completers who are employed and b) completers who are employed in a rural district. The percentage of educators working in a rural district is then calculated. The EPPs with the five highest percentages are eligible to be recognized.

Preparing Educators for Long-term Success

This dimension of high-performance identifies EPPs that prepare educators who continue working in Texas public schools for at least five years. The first measure identifies the percentage of teachers who are recommended for certification by an EPP who are working as classroom teachers five years after their standard

certification becomes effective. To calculate this measure, the TEA first identifies that subset of educators from an EPP who are working as classroom teachers in the year following their completion with the EPP and determines which of those teachers are employed as classroom teachers five years later. Using these numbers, the TEA computes a percentage. The standard for recognition on this measure is set at 95% or higher.

The second measure in the dimension is continued employment in any role in the Texas public education system. The calculation for this measure is similar to the prior measure; however, this measure reports the percentage of classroom teachers still employed in any role after five years. The eligible population is educators from all certification classes prepared by the EPP. The standard for recognition on this measure is 95% or higher.

The third measure in this dimension is the employment of newly prepared principals. The calculation for this standard is the percentage of newly prepared principals working in a public school in Texas in an educational leadership role (principal, assistant principal, instructional leader, etc.) within three years of obtaining principal certification. The standard for recognition on this measure is 75%.

Innovative Educator Preparation

The final dimension of recognition gives the SBEC the opportunity to designate EPPs that have implemented innovative approaches to educator preparation. Specific topic areas ~~(calls)~~ for innovation are updated ~~[annually]~~ using input from the SBEC ~~[-, the TEA, and advisory committees]~~. EPPs ~~[shall]~~ respond to a call for applications in a format and a timeline determined by TEA and the SBEC. ~~[these calls by July 1 of the reporting year with]~~ EPPs must submit a complete set of materials to be eligible for recognition. The TEA reviews applications for topic alignment and completeness. Appropriate applications are reviewed by an SBEC subcommittee and approved by the full SBEC. Recognition is awarded at the discretion of the committee and the SBEC.

~~[For 2019–2020, the SBEC seeks to recognize EPPs with innovative practices related to authentic, practice-based educator preparation. Strong partnerships between EPPs, local education agencies (LEAs), and campuses can foster teacher preparation that benefits teachers, schools, and students in ways that traditional internships or clinical teaching appointments may not. Practice-based preparation may include, for example, residency models or multi-semester clinical teaching appointments. Programmatic requirements must be well above the SBEC-mandated minimums to be considered.]~~

~~[Applications for recognition will include an executive summary, a description of the program's innovative practices in authentic, practice based educator preparation, a demonstration of success including measurable outcomes, an explanation of related programmatic values and goals, a description of the implementation of current practices as part of a continuous improvement effort, supporting information from candidates and EPP partners, and peer reviewed research identifying the EPP practices as best practices in the field.]~~

For 2020-2021, the SBEC seeks to recognize EPPs that engage in comprehensive partnerships with LEAs to support district-specific needs, in one or more of the following areas: supporting districts and mentor teachers through the pandemic, accelerating learning in response to COVID-related learning loss, addressing staffing challenges, and implementing best practices that emerged from EPP and/or district responses to the COVID pandemic. Such practices must be well above SBEC-mandate minimums to be considered.

Chapter 9 – Determination of ASEP Index Score

Overview

Per 19 TAC §229.4(b), ~~[starting in the 2020–2021 academic year]~~, the ASEP Index Score may be used for accreditation status determination. This scoring system uses data from the seven ASEP Indicators along with differential weights to determine the total number of points possible for an EPP based on the data present, and the total number of points achieved. This section presents a description of the calculation, the weighting approach, special longitudinal considerations, and a worked example.

Calculation

The ASEP indicators consist of seven separate performance measures. Per TEC, §21.045(a), disaggregated categories with respect to gender, race, and ethnicity are used in the determination of continuing accountability. For these categories, TEA uses the race, ethnicity, and gender designations defined in 19 TAC §229.2(13). The table below presents a matrix representation of this model.

ASEP Measure	All	Female	Male	African American	Hispanic / Latino	Other	White
1a: Certification examination results for PPR exams							
1b: Certification examination results for non-PPR exams							
2: Principal appraisal of the preparation of first-year teachers							
3: Improvement in student achievement of students taught by beginning teachers							
4a: Frequency and duration of field observations							
4b: Quality of field supervision							
5: Satisfaction of new teachers							

As described in the following section, weights are assigned to the individual measure. Additionally, a weight is assigned to the “All” category, separate from the individual demographic categories.

The total number of points achieved is calculated based on the EPP performance in each measure for each group. Values are assigned for each cell in the matrix based on the current and prior year performance.

Performance	Value
Met Standard	1
Did Not Meet Standard and Met Standard in Prior Year	0
No Data/Small Group Exception	<blank>
Did Not Meet Standard and Did Not Meet Standard in Prior Year	-1

The total number of points achieved is then calculated by multiplying the individual cell by the measure weight and the demographic weight, and then summing all the cells. Blank cells are omitted from the sum.

The total number of points possible is calculated based on the data available. Cells are assigned a value of 1 if there is data available for the current academic year. Each cell is then multiplied by the measure weight and the demographic weight, and the cells are summed.

The percentage of points achieved is found by dividing the total number of points achieved by the total number of points possible and multiplying by 100. This value is then rounded to the nearest whole number.

Weighting

The table below presents the measure weights.

ASEP Measure	Weight
1a: Certification examination results for PPR exams	4
1b: Certification examination results for non-PPR exams	2
2: Principal appraisal of the preparation of first-year teachers	1
3: Improvement in student achievement of students taught by beginning teachers	3
4a: Frequency and duration of field observations	3
4b: Quality of field supervision	3
5: Satisfaction of new teachers	2

The table below presents the demographic group weights.

Group	Weight
All	6
Female	1
Male	1
African American	1
Hispanic / Latino	1
Other	1
White	1

Worked Example

Example Calculation: ASEP Index

Step 1: Identify the EPP results for all ASEP Indicators for all groups.

Step 2: Populate the results table.

ASEP Measure	All	Female	Male	African American	Hispanic / Latino	Other	White
1a: Certification examination results for PPR exams	Met (1)	Met (1)	Met (1)	Met (1)	Met (1)	Met (1)	Met (1)
1b: Certification examination results for non-PPR exams	Met (1)	Met (1)	Did not meet (0)	Met (1)	Met (1)	Met (1)	Met (1)
2: Principal appraisal of the preparation of first-year teachers	Met (1)	Met (1)	Did not meet (0)	Met (1)	Did not meet (0)	Met (1)	Met (1)
3: Improvement in student achievement of students taught by beginning teachers ¹²	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only
4a: Frequency and duration of field observations	Met (1)	Met (1)	Met (1)	Met (1)	Met (1)	Met (1)	Met (1)
4b: Quality of field supervision	Met (1)	No Data	No Data	No Data	No Data	No Data	No Data
5: Satisfaction of new teachers	Met (1)	Met (1)	Met (1)	Small Group	Did not meet (0)	Small Group	Met (1)

Step 3: Multiply each cell by the corresponding measure weight and demographic weight.

ASEP Measure	All	Female	Male	African American	Hispanic / Latino	Other	White
1a: Certification examination results for PPR exams	24	4	4	4	4	4	4
1b: Certification examination results for non-PPR exams	12	2	0	2	2	2	2
2: Principal appraisal of the preparation of first-year teachers	6	1	0	1	0	1	1
3: Improvement in student achievement of students taught by beginning teachers							
4a: Frequency and duration of field observations	18	3	3	3	3	3	3
4b: Quality of field supervision	18						
5: Satisfaction of new teachers	12	2	2		0		2

Step 4: Sum all the cells to find the total points achieved (152).

Step 5: Populate the data available table.

ASEP Measure	All	Female	Male	African American	Hispanic / Latino	Other	White
1a: Certification examination results for PPR exams	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)
1b: Certification examination results for non-PPR exams	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)

¹²Per 19 TAC §229.4(a)(3), Indicator 3 is not consequential for ASEP ratings until TEA has data necessary to calculate this performance standard for two years following the 2019–2020 academic year. [For the 2020–2021 reporting year,]

ASEP Measure	All	Female	Male	African American	Hispanic / Latino	Other	White
2: Principal appraisal of the preparation of first-year teachers	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)
3: Improvement in student achievement of students taught by beginning teachers	No (0)	No (0)	No (0)	No (0)	No (0)	No (0)	No (0)
4a: Frequency and duration of field observations	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)
4b: Quality of field supervision	Yes (1)	No (0)	No (0)	No (0)	No (0)	No (0)	No (0)
5: Satisfaction of new teachers	Yes (1)	Yes (1)	Yes (1)	No (0)	Yes (1)	No (0)	Yes (1)

Step 6: Multiply each cell by the corresponding measure weight and demographic weight.

ASEP Measure	All	Female	Male	African American	Hispanic / Latino	Other	White
1a: Certification examination results for PPR exams	24	4	4	4	4	4	4
1b: Certification examination results for non-PPR exams	12	2	2	2	2	2	2
2: Principal appraisal of the preparation of first-year teachers	6	1	1	1	1	1	1
3: Improvement in student achievement of students taught by beginning teachers							
4a: Frequency and duration of field observations	18	3	3	3	3	3	3
4b: Quality of field supervision	18						
5: Satisfaction of new teachers	12	2	2		2		2

Step 7: Sum all the cells to find the total points possible (158).

Step 8: Divide the points achieved by the points possible. Multiply by 100. Round to the nearest whole number.

$\frac{\text{Number of ASEP Points Earned}}{\text{Number of ASEP Points Possible}} =$ $\frac{152}{158} \times 100 =$ <p>96.20%, which rounds to 96%</p>

Open-Enrollment Charter School Generation 27 Application Updates

November 18, 2021

COMMITTEE ON SCHOOL INITIATIVES: DISCUSSION STATE BOARD OF EDUCATION: NO ACTION

SUMMARY: The director of the Division of Charter School Authorizing and Administration will discuss updates regarding the Generation 27 Open-Enrollment Charter Application cycle.

STATUTORY AUTHORITY: Texas Education Code ([TEC](#)), [§12.101](#).

TEC, §12.101 requires the commissioner to notify the State Board of Education (SBOE) of each charter the commissioner proposes to grant. Unless, before the 90th day after the date on which the board receives the notice from the commissioner, a majority of the members of the board present and voting, vote against the grant of that charter, the commissioner's proposal to grant the charter takes effect.

The full text of statutory citations can be found in the statutory authority section of this agenda.

BACKGROUND INFORMATION AND JUSTIFICATION: The SBOE is engaged in an ongoing effort to remain abreast of the evolving state-educational landscape and prepare to address areas that are within its jurisdiction. To that end, this item provides an opportunity for the committee to discuss updates pertaining to the Generation 27 application.

Public information concerning open-enrollment charter schools is available at the division of Charter Schools – Subchapter D Charters page found on the Texas Education Agency's website (<https://tea.texas.gov/charterapp.aspx>). The Generation 27 application and required attachments are accessible on that page.

Staff Members Responsible:

Kelvey Oeser, Deputy Commissioner, Educator Support

Marian Schutte, Director, Charter School Authorizing and Administration

INFORMATION MATERIALS

STATE BOARD OF EDUCATION OPERATING RULES
(amended January 26, 2021)

CHAPTER 1. BOARD ORGANIZATION

The statutory citation for this chapter is the Texas Education Code, §7.107.

§1.1. Officers of the Board.

- (a) Selection.
 - (1) The vice chair and secretary of the board shall be elected by a majority vote in accordance with Texas Education Code, §7.107, to serve for a term of two years and until their successors are elected.
 - (2) Either of these officers may be removed from office by a vote of not less than two-thirds of the membership of the board.
 - (3) In case of death or resignation of the vice chair or the secretary of the board, the board shall elect by a majority vote a board member to fill the vacancy for the unexpired term of that officer at the next board meeting.
- (b) Duties.
 - (1) Chair. The chair shall preside at meetings and perform all other duties prescribed by law, by board rule, or by board direction.
 - (2) Vice chair. The vice chair shall perform the duties of the chair in case of absence or disability of the chair and other duties as the chair may request. Should the office of the chair become vacant, the vice chair shall serve as chair until a successor has been appointed by the governor.
 - (3) Secretary. The secretary shall perform all duties as required by law and such other duties as the chair may request.

§1.2. Committees of the Board.

- (a) The standing committees of the board and their areas of oversight are:

Committee of the Full Board

1. Public testimony
2. Establishment of essential knowledge and skills (TEKS)
3. Instructional materials proclamations and adoption of instructional materials
4. Consideration of the Commissioner of Education's open-enrollment charter school proposals

Committee on Instruction

1. Establishment of curriculum and graduation requirements
2. Curriculum implementation (including credit by examination, Texas Advanced Placement Incentive Program, and procedures concerning dyslexia and related disorders)
3. Student assessment program implementation
4. General education
5. Education of individuals with disabilities
6. Gifted and talented education
7. Adult education
8. Library standards
9. Texas School for the Blind and Visually Impaired/Texas School for the Deaf

Committee on School Finance/Permanent School Fund

1. State and federal funding issues
2. Financial budgeting, reporting, and regulation
3. Contract and grant approval
4. Instructional materials financing and operations
5. Community education funding
6. Oversight of the Bond Guarantee Program
7. Permanent School Fund management oversight, including audit responsibility, investment objectives, and investment decisions
8. Review of nominations for gubernatorial appointments: Teacher Retirement System, School Land Board

Committee on School Initiatives

1. Long-range plans required by statute
 2. Educational technology and telecommunications
 3. Review and evaluation of charter school applications, revisions, and amendments the commissioner of education proposes to grant
 4. State Board for Educator Certification rules review
 5. School board member training policy
 6. Hearing examiners
 7. Military reservation and special purpose school districts
 8. Extracurricular activities
 9. Home-rule school district probation and revocation
- (b) Amendments to the areas of committee oversight reflecting new or changing board responsibilities may be made during the board's periodic operating rules review or by means of resolution addressing the change in responsibilities should such change occur between the operating rules review.
- (c) Committees may receive information, investigate, study and report to the board. The board may from time to time define by resolution the areas of oversight of each committee as may be necessary. Each committee shall review and make recommendations on the board agenda items falling under its areas of oversight; except that the chair of the board, in consultation with the respective committee chair, may designate any board agenda item for review and recommendation by the Committee of the Full Board.

- (d) The Committee of the Full Board shall be composed of all members of the board, and the chair of the board shall be the chair of the Committee of the Full Board.
- (e) The Committees on Instruction, School Finance/Permanent School Fund, and School Initiatives shall be composed of five members selected by the officers of the board. Each member will serve on one committee in addition to the Committee of the Full Board. The officers of the board shall request in writing the committee choices of the members ranked in order of preference and shall make committee assignments in the public view for terms of two years at the organizational meeting after the qualification of new members as the next order of business following election of board officers and adoption of rules. Vacancies shall be filled in a similar fashion. In addition to preference, the officers of the board shall also consider seniority (total years of service), ethnicity balance, gender balance, racial diversity, geographic balance, and relevant qualifications specific to a committee assignment in making committee assignments. Each committee shall elect a chair from among its members and the chair may appoint a vice chair. An officer of the board is not eligible to serve as the chair of a standing committee.
- (f) Ad hoc committees (i.e., task forces) may be constituted from time to time as directed by a vote of the board or by the chair to perform such duties as the board or chair may assign. The personnel and length of service of ad hoc committees shall be designated by the chair unless otherwise directed by a vote of the board. No action taken by any ad hoc committee shall be final or binding upon the board unless otherwise directed by a vote of the board.
- (g) Occasionally, committees may find it necessary to request legal opinions, comprehensive studies, or reports to be prepared by the staff to aid the committees in their deliberations. To ensure clarity and coordination, all such requests shall be directed to State Board of Education Support staff and shall be reflected in the minutes of the committee meeting. The Chair or the Commissioner may request that the Attorney General issue an opinion under Texas Government Code §402.042.

§1.3. Board Member Seating Selection.

With the exception of the chair, vice chair, and secretary, the seating of board members will be by State Board of Education districts. The seating for the remaining 12 members will be rotated annually at the first board meeting of the calendar year. Any member with a special need may exchange seats with another board member who is in agreement with that exchange.

CHAPTER 2. MEETINGS

The statutory citations for this chapter are the Texas Education Code, §§7.055, 7.106, 7.107, 7.110, and 39.030, and the Texas Government Code, Title 5, Open Government; Ethics, Subtitle A, Open Government, Chapter 551, Open Meetings.

§2.1. Regular Meetings of the Board.

In accordance with Texas Education Code, §7.106, four regular meetings of the board a year shall be held in Austin, Texas. If a quorum is not present for a meeting, the meeting shall be recessed or adjourned and all items on the agenda shall be heard at a subsequent meeting.

§2.2. Special Meetings of the Board.

Special meetings of the board may be held at times and places as ordered by the chair during a regular meeting, or special meetings may be called by the chair of the board to be held at a time and place the chair shall designate.

§2.3. Open Meetings.

Regular, special, and committee meetings of the board shall be open to the public; however, the board or board committees may meet in executive session in accordance with law and these rules. Open meetings of the board and standing committees shall be broadcast live over the Internet. The chair may limit in-person attendance at a meeting to ensure health and safety of board members and members of the public. In such instances, governor's orders shall be followed, and members of the public shall be given access to view all portions of the meetings virtually.

§2.4. Executive Sessions.

Executive sessions of the board or of board committees are meetings with only board members and persons authorized by law. Executive sessions shall be held in accordance with Texas Government Code, Chapter 551, Open Meetings.

§2.5. Agendas.

- (a) The chair has the primary responsibility for creating the SBOE meeting agendas. This includes the SBOE agenda, the Committee of the Full Board agenda, and all committee agendas. Other than as provided in this subsection and subsections (b) and (c) of this section, all agenda items are subject to the approval of the chair. If a member wishes an item to be placed on the agenda of the Committee of the Full Board, the member should request in writing that the chair place the item on the agenda. The chair will respond in writing whether or not the item will be placed on the agenda. If the chair declines in writing to place the item on the agenda, the member may make a motion during a board meeting to include the item on the agenda. If the board approves the request, it is placed on the agenda of the Committee of the Full Board for the next meeting.
- (b) The chairs of the Committee on Instruction, Committee on School Finance/Permanent School Fund, Committee on School Initiatives, and ad hoc committees shall collaborate with the board chair regarding items to be placed on their respective committee agendas. Committee agendas shall include statutorily mandated motions, items assigned to the

committee by the board chair, items posted at the discretion of the committee chair and items voted on as set out in subsection (c) below. Committee chairs may post discussion items per their discretion, but action items must be approved by the board chair, subject to the process set out in (c) below.

- (c) Any member of the board may request that a committee chair place an item on the agenda of that chair's committee, other than the Committee of the Full Board, as either a discussion item or an action item. If the committee chair agrees, the item is placed on the agenda of that chair's committee in accordance with the member's request, subject to the approval of the board chair. If the committee chair denies the member's request, the member may appeal the denial to the board chair. If the board chair denies the request, the member may appeal the denial to the board. If the board approves the request, it is placed on the agenda of the committee to which the request was made at the next meeting of that committee.
- (d) A subject on the agenda that is outside the scope of the board's authority may only be considered by the board or the Committee of the Full Board by a vote of a majority of the membership of the board. The chair, in consultation with Agency legal counsel, shall make a determination regarding whether an item is outside the scope of the board's authority when preparing the agenda. Any member may move to place an item determined by the chair to be outside the scope of the board's authority on the agenda for a subsequent meeting.
- (e) The commissioner of education shall prepare and submit to each member of the board, prior to each meeting, a draft agenda schedule listing item titles with short summaries of each item. Materials supplementing the agenda may be included. Official agendas will be available the day of the board meeting.

§2.6. Official Transaction of Business.

- (a) The board shall transact official business only when in session with a quorum present. Unless otherwise provided by law, in order for a board action to be final, it must be approved by a majority of the board members present and voting.
- (b) The chair may authorize the board to meet via remote video or web conference. As required by Government Code §551.127(c), if videoconference calling technology is used, the meeting location where the presiding officer of the meeting is present must be open to the public, except during executive sessions. The chair may limit the number of remote conference locations in the interest of decorum and capacity.
- (c) The chair may modify procedures for conducting meetings of the board if emergency protocols are enacted by the governor related to a pandemic or similar event. In such instances, governor's orders and emergency rules shall be followed.
- (d) If a board member participates in a meeting virtually, the board member must be visible by video and must have capabilities to be heard by other board members and members of the public. A member who is not present on camera during a vote of the board will be noted as absent for the vote.

- (e) No posters, props, or other visual displays are allowed by board members within the meeting rooms or at remote locations without permission from the presiding chair.

§2.7. Rules of Order.

- (a) The board shall observe *Robert's Rules of Order, Newly Revised*, except as otherwise provided by board rules or by statute.
- (b) The presiding chair shall preserve order and decorum during meetings. In case of disturbance or disorderly conduct in the public gallery, the chair may order that any disruptive individuals be cleared from the area.
- (c) No signs, placards, flags, noisemakers, or other objects of a similar nature shall be permitted in the audience gallery area.
- (d) No applause, outburst or other demonstration by any spectator shall be permitted during the public testimony, public hearing or debate portion of any State Board of Education meeting. After warnings to the audience to refrain from such demonstrations, the presiding chair may direct that disruptive individuals in the gallery area be removed as necessary to preserve decorum during meetings.
- (e) Supporters of a testifier may not gather behind the podiums used for testimony. Testifiers are free to use a portion of their testimony time to acknowledge supporters seated in the audience.

§2.8. Minutes.

The official minutes of the board shall be kept by the office of the commissioner of education or the commissioner's designee and shall be available to any citizen desiring to examine them. Official minutes are those which the board has approved, and which carry the original signature of the secretary of the board.

§2.9. Resolutions.

- (a) A member wishing to offer a resolution shall give notice of the resolution by submitting a copy to the chair and the State Board of Education Support staff not less than four weeks prior to the Monday of the week during which the meeting at which the resolution is to be considered. The board shall consider the resolution and any germane amendments at the next meeting following such notice.
- (b) Titles for congratulatory, commendatory or other non-substantive resolutions shall be submitted by the timelines prescribed in this section with resolution text following a date and time consistent with the staff's pre-meeting preparation timeline.
- (c) The board may consider a resolution which expresses an opinion related to specific instructional materials or which expresses concerns as to the appropriateness of specific instructional materials for certain ages or populations. Resolutions considered under this subsection must conform to the following:
 - (1) The resolution shall be submitted in compliance with subsection (a) of this section.

- (2) Board action on a resolution expressing an opinion related to specific instructional materials may only be considered after final action has been taken concerning placement of the specific instructional materials on the list of adopted instructional materials for use in the public schools of Texas. Board action relative to instructional materials resolutions must take place within 90 days of adoption of the specific instructional materials under 19 TAC Chapter 66, State Adoption and Distribution of Instructional Materials, §66.66(b).
- (3) Nothing in the resolution shall be construed to replace or modify any final action taken by the board under 19 TAC Chapter 66.
- (4) The board may adopt a resolution expressing an opinion related to instructional materials based on the following criteria:
 - (A) Instructional materials should present the most current factual information accurately and objectively without editorial opinion or bias by the authors. Theories should be clearly distinguished from fact and presented in an objective educational manner.
 - (B) Instructional materials should promote citizenship, patriotism, democracy, understanding of the essentials and benefits of the free enterprise system, respect for recognized authority, and respect for individual rights. The materials should not include selections or works that encourage or condone civil disorder, social strife, or disregard of the law. Violence, if it appears, should be treated in the context of its cause and consequence. It should not appear for reasons of unwholesome excitement or sensationalism.
 - (i) Instructional materials should present positive aspects of the United States and its heritage.
 - (ii) When significant political or social movements in history generate no clear consensus, instructional materials should present balanced and factual treatment of the positions.
 - (iii) Free enterprise means an economic system characterized by private or corporate ownership of capital goods; investments that are determined by private decision rather than by state control; and prices, production, and the distribution of goods that are determined in a free market.
 - (C) Instructional materials should not include blatantly offensive language or illustrations.
 - (D) Instructional materials should treat divergent groups fairly without stereotyping and reflect the positive contributions of all individuals and groups to the American way of life. Illustrations and written materials should avoid bias toward any particular group or individual and present a wide range of goal choices. Particular care should be taken in the treatment of ethnic groups, issues related to the aging and aged, roles of men and women, the dignity of workers, and respect for the work ethic.

- (i) Instructional materials should not encourage lifestyles deviating from generally accepted standards of society.
 - (ii) Instructional materials should provide an objective view of cultural confluence and include information needed to develop mutual understanding and respect among all elements of our population. Materials should reflect an awareness that culture and language variation does exist and can be used to promote successful learning.
 - (iii) Instructional materials should present examples of men and women participating in a variety of roles and activities and also shall present the economic, political, social, and cultural contributions of men and women, past and present.
 - (iv) Instructional materials that treat aspects of the world of work should reflect the positive contributions of all types of careers to the American economic system and way of life. People presented should reflect varieties of work and be treated without bias toward particular kinds of work.
 - (v) Instructional materials should present traditional and contemporary roles of men, women, boys, and girls.
 - (vi) Instructional materials should present balanced treatment of issues related to aging and the aged.
- (5) A representative of the publisher of the specific instructional material shall be given the opportunity to address the board prior to action by the board on such a resolution.
 - (6) A copy of any resolution passed by the board expressing an opinion related to specific instructional material shall be provided to the board president and superintendent of each school district in Texas.

§2.10. Oral Public Testimony in Connection with Regular Board and Committee Meetings.

- (a) General Provisions.
 - (1) In accordance with Texas Education Code, §7.110, the board shall provide opportunity for oral public testimony at regular committee meetings, special meetings, and at regularly scheduled meetings of the State Board of Education.
 - (2) Work session and ad hoc committee meetings are exempt from this requirement.
 - (3) The presiding chair shall take appropriate action to avoid unduly repetitious testimony.
 - (4) The presiding chair shall assure that members of the public with differing viewpoints have reasonable access to address the board and take steps to ensure that individuals will be given priority over registered lobbyists.

- (5) The presiding chair shall determine which speakers will be heard and the order in which they will be heard if the number exceeds that number which may reasonably be expected to testify in the allotted time for presentations. The presiding chair shall also determine whether speakers who did not register or who registered late will be heard and whether persons asking to testify as a substitute for a registered speaker may do so.
 - (6) The board, without debate, may allow a person to testify for clarification and informational purposes, whether or not he/she has registered or previously testified. The person is not required to honor the request.
- (b) Registration Procedures.
- (1) Individuals may register between the hours of 8 a.m. (Central Time) on the Thursday preceding the board meeting and 5 p.m. on the Friday preceding the board meeting on the agency website at <https://tea.texas.gov/PublicTestimonySBOE/>, or, during normal operating hours, by telephone at (512) 463-9007 or in person at the William B. Travis (WBT) State Office Building, 1701 N. Congress, room 1-109, Austin, Texas 78701.
 - (2) The speaker shall provide his or her name and organizational affiliation, if any, contact telephone number, mailing address, email address, and indicate which item or topic the speaker will address and viewpoint on the topic; and the speaker will disclose if he or she is a lobbyist registered with the Texas Ethics Commission.
 - (3) A person may register himself or herself, and one other person. Organizations may not register more than two persons per item.
 - (4) Those registering online will receive an email confirming the registration during the next business day.
 - (5) Registrations will be listed based upon registration date and time or alternating points of view in order of registration date and time.
 - (6) Late registration will be accepted until 30 minutes before the scheduled start of a meeting, however late registrants are not guaranteed an opportunity to testify due to time constraints.
 - (7) Speakers will be informed if it appears that time constraints will not permit all speakers to make their presentation within the allotted time.
 - (8) All speakers shall provide twenty (20) collated or stapled copies of their testimony. Registered speakers who are unable to make their presentations due to time constraints are encouraged to provide twenty (20) copies of their testimony for distribution to board members and agency executive staff. Written testimony will not be attached to committee minutes.
- (c) Oral Public Testimony to Committees.
- (1) Oral public testimony to committees is limited to the topics posted for action or discussion on committee agendas at that specific committee meeting.

- (2) In order to maximize the total number of testifiers who are able to provide oral testimony, two-minute time limits on individual oral testimony will be imposed unless modified by the presiding chair.
 - (3) The presiding chair shall designate whether oral public testimony shall be taken at the beginning of the meeting or at the time the related item is taken up by the committee.
 - (4) The presiding chair shall take steps to ensure that individuals will be given priority over registered lobbyists. The committee, without debate, may allow a person to testify for clarification and informational purposes, whether or not he/she has registered or previously testified. The person is not required to honor the request.
- (d) Oral Public Testimony to the General Meeting of the Board.
- (1) Oral public testimony at general meetings of the State Board of Education is limited to topics that are *not* posted for action or discussion at the corresponding regular committee meetings or information published in the information section of the agenda.
 - (2) Thirty (30) minutes shall be allotted for oral public testimony, excluding the questions and answers, at the beginning of each board meeting, unless modified by a majority vote of the board. Three-minute time limits on individual oral testimony will be imposed unless modified by the presiding chair. Testimony invited by board members shall not be counted against the time allotted for oral public testimony. Agency staff shall inform the presiding chair and any affected registered speakers prior to the meeting if time constraints may not allow some registered speakers to testify.
 - (3) The presiding chair shall take steps to ensure that individuals will be given priority over registered lobbyists. The board, without debate, may allow a person to testify for clarification and informational purposes, whether or not he/she has registered or previously testified. The person is not required to honor the request.

§2.11. Written Testimony in Connection with Regular Board and Committee Meetings.

- (a) Persons may file written testimony with regard to any committee or board agenda item. Any written testimony or comments shall identify the date of the meeting; the subject of the comments; the name of the author; the name of the author's organizational affiliation, if any; and indicate whether the author is a lobbyist registered with the Texas Ethics Commission.
- (b) If the written testimony is submitted at the regular board or committee meeting, twenty (20) collated or stapled copies shall be provided for distribution to board members and agency executive staff. Written testimony will not be attached to the board minutes.
- (c) Persons who were unable to attend or to testify at a committee or board meeting due to time constraints may provide twenty (20) collated or stapled copies of their testimony to agency staff for distribution to board members and agency executive staff.

§2.12. Public Hearings.

- (a) Types of Public Hearings.
 - (1) Hearings regarding proposed board rules. The board shall conduct a public hearing on a substantive rule if a hearing is requested by at least 25 persons, a governmental subdivision or agency, or an association having at least 25 members. Testimony is restricted to comments regarding the proposed action. The hearing must be set to take place before any action is adopted. The public hearing shall be conducted before the appropriate board committee as determined by the board chair in accordance with the areas of oversight defined in board operating rules.
 - (2) Other types of hearings. The board may also hold public hearings on proposed actions, such as those relating to adoption of Texas essential knowledge and skills and (TEKS) instructional materials issues. The public hearing shall be conducted before the appropriate board committee as determined by the board chair in accordance with the areas of oversight defined in board operating rules. Public hearings regarding the instructional materials adoption process are governed by 19 TAC §66.60. Public hearings regarding revision of the TEKS are governed by the SBOE-approved TEKS review and revision process.
- (b) Speakers shall preregister in accordance with the procedures set out in §2.10(b).
- (c) The presiding chair shall establish the procedures for conducting the public hearing. These procedures shall include, but are not limited to, the following:
 - (1) Providing for presentations from invited persons or an introduction from staff;
 - (2) Providing that preregistered speakers are heard in order of registration times and dates, or requiring alternating points of view in order of registration times and dates;
 - (3) Establishing time limits for speakers, generally two minutes each;
 - (4) Adjourning the hearing at the end of the allotted time period listed in the agenda item or any extension granted by a vote of the majority of the board or appropriate committee.
- (d) Persons who testify at a public hearing may bring twenty (20) collated or stapled copies of their testimony for distribution to board members and agency executive staff.
- (e) Persons who were unable to testify at a public hearing due to time constraints may provide twenty (20) members and agency executive staff.
- (f) Prior to the meeting, agency staff shall inform the presiding chair and shall attempt to inform any affected registered speakers if time constraints may not allow some registered speakers to testify.

§2.13. Public Comments Regarding Proposed Rulemaking.

All interested persons have a reasonable opportunity to submit data, views and arguments, prior to the board adoption of any rule. Public comments regarding proposed board rules may be submitted as provided in the notice of proposed rulemaking published in the *Texas Register*. The deadline for submitting public comments is 5:00 p.m. on Friday the week prior to the start of the board meeting. The board will also take registered oral and written comments on proposed rulemaking at the appropriate committee meeting.

CHAPTER 3. TRAVEL AND EXPENSES

The statutory citations for this chapter are the Texas Education Code, §7.105, Texas Government Code, Chapter 660, and the General Appropriations Act.

§3.1. Reimbursement of Expenses.

- (a) Members of the State Board of Education receive no salary but are reimbursed for all expenses incurred for attending regular and special meetings of the board and of board committees.
- (b) All reimbursements for expenditures shall be in accordance with Texas Education Code, §7.105(b), Texas Government Code, Chapter 660, the General Appropriations Act, and these rules.
- (c) Only expenses of board members may be reimbursed. Expenses for spouses, family, or other persons traveling with board members are not reimbursable.
- (d) Board members must submit receipts for the following expenses:
 - (1) public transportation (excluding receipts for bus, taxi, ride share services or limousine);
 - (2) car rental;
 - (3) lodging; and
 - (4) conference registration fees (which may not include banquets, books, or materials).
- (e) Lodging receipts must show the rate for single occupancy plus tax which will be the maximum reimbursable amount per day for lodging.
- (f) Receipts are not required to claim expenses for meals; however, the General Appropriations Act provides that "none of the funds appropriated under this act for travel expenses may be expended for alcoholic beverages" and no such expenses may be claimed for reimbursement.
- (g) Other official travel expenses which board members may claim include the following when the expenses are required for the conduct of state business:
 - (1) parking fees (including personal vehicles);
 - (3) notary fees for official documents; and
 - (4) wireless connection.

- (h) Board members may not claim reimbursement for expenses such as the following:
 - (1) laundry or other personal items;
 - (2) tips or gratuities of any kind; and
 - (3) alcoholic beverages.
- (i) All claims for reimbursement will be reviewed by agency accounting personnel to ensure compliance with the requirements of the appropriations act, and any appropriate adjustments to claims shall be made by staff.
- (j) A yearly budget shall be established for travel of board members. The budgeted amount would include an allotment of travel funds for board members to attend board meetings and committee meetings, and an allotment for in-district, out-of-district, and out-of-state meetings. An additional allotment shall be budgeted for travel of the chair when representing the State Board of Education at meetings. When there is a change in office during the fiscal year, the travel budget will be reassigned to the new board member.
- (k) A board member may be reimbursed for travel expenses for attending activities other than State Board of Education meetings and committee meetings provided that the board members are in compliance with the following procedures:
 - (1) In-District and Out-of-District Travel. In-district and out-of-district travel is at each member's discretion. Prior approval is not required; however, any travel for which reimbursement is requested must be directly related to the duties and responsibilities of the State Board of Education. Any requests for reimbursement, directly or indirectly related to seeking election to office, will not be allowed.
 - (2) Out-of-State Travel. Prior approval is required by the officers of the board (chair, vice chair, and secretary).
- (l) A board member may be reimbursed for travel expenses incurred while serving on any board, council, or commission or serving in any official board position as an appointee for specific administrative functions when appointed by the State Board of Education or its chair, or subject to approval of the board or its officers of the board.
- (m) None of the funds appropriated in the General Appropriations Act shall be used for influencing the outcome of any election, or the passage or defeat of any legislative measure.

§3.2. Travel Arrangements and Hotel Reservations for State Board of Education Meetings.

- (a) Board members shall be responsible for making their own arrangements for travel to and from board meetings. Agency travel coordinators are available for assistance.
- (b) A State Board of Education Support staff member or his/her designee will make guaranteed hotel reservations for each board member upon request.

- (c) Any change in or cancellation of reservations shall be the responsibility of the individual board member in whose name the reservations were made. Board members who wish to change or cancel their reservations must contact the hotel directly or call the State Board of Education support office. All bills received by the agency for unused or uncanceled reservations will be forwarded for payment to the board member in whose name the reservations were made.

§3.3. Acceptance of Gifts and/or Grants for Charter School Evaluation.

- (a) Purpose. The State Board of Education (SBOE) may accept a gift and/or grant for the limited purpose of expenses associated with evaluating an applicant for an open-enrollment charter school.

- (1) An entity making a gift and/or grant under this section may not:
 - (A) limit the use of the funds to any individual applicant, cycle or class of applicants;
 - (B) be a charter operator in this or any other state, a management company, service provider or vendor of any kind to charter schools in this or any other state;
 - (C) have common board members or corporate members with any entity operating a charter in Texas or applying to operate a charter in Texas;
 - (D) be an individual required to register as a lobbyist under Chapter 305, Government Code; or
 - (E) be an employee, attorney, contractor or other agent of any kind to charter schools in this or any other state.
- (2) An entity making a gift and/or grant under this section may not do so if the source of funds used for the gift and/or grant were received from an entity that could not make a gift and/or grant under this section.
- (3) For purposes of this section, a spouse or dependent child of an individual prohibited from making a gift and/or grant is also prohibited.
- (4) For purposes of this section, an entity includes any legal entity such as corporations, individuals and other business associations. An individual is limited to a natural person.
- (5) An entity making a gift and/or grant shall certify that it has complied with all requirements of this section in a format approved by the board chair.

- (b) Procedure. The SBOE may accept a gift and/or grant under this section only by an affirmative vote of the board.

- (1) A charter may not be evaluated using funds under this section unless the commissioner has:

- (A) proposed to award a charter to that applicant pursuant to Section 12.101(b); or
 - (B) requested the participation of individual board members in the agency's preliminary evaluation of an applicant.
- (2) The commissioner shall receive, disburse and account for funds accepted by the board.
 - (3) Funds accepted under this section may be used solely to pay reasonable travel expenses, including meals and accommodations, for SBOE members and TEA staff as necessary to evaluate applicants for open-enrollment under this section. Unless approved by the board chair and the commissioner, travel expenses are limited to those available for travel by SBOE members or state employees.
 - (4) In making decisions under this section, the board chair will consult with the board member acting as a liaison under Section 12.101(b). The board chair will also consult with the chair of the Committee on School Initiatives, unless doing so would create a quorum of a committee of the board. A decision by the board chair under this section is final.
 - (5) Board members evaluating a charter applicant under this section shall be selected by the board chair. The board chair will, to the extent possible, give preference to board members whose districts include proposed locations at which the charter would operate. Under no circumstances will a quorum of the board or a committee of the board participate in an evaluation under this section.
 - (6) The board chair may request that relevant TEA employees accompany board members in evaluating charter applicants under this section. The commissioner must approve participation of agency employees.
 - (7) Except as provided by this subsection, board members and TEA staff may not accept anything of value from an applicant and shall limit contact with the applicant and its employees and representatives to the actual investigation of the charter. The board chair may authorize acceptance of reasonable local transportation and meals from the applicant as necessary to facilitate the evaluation.
 - (8) In addition to board members and TEA staff, the board chair may authorize other professionals to participate in an evaluation under this section. Such a professional may not be an individual or entity unable to donate funds under subsection (a) and is subject to all conditions and limits imposed by this section on board members.
- (c) Evaluation. Each board member will individually report to the Committee on School Initiatives regarding his/her evaluation of a proposed charter prior to consideration of the charter by the board under §7.102(c)(9). The Committee on School Initiatives will develop a standard form for use by board members in evaluating a charter under this section.
 - (d) Reporting. Expenses reimbursed for each board member, TEA staff or other professionals shall be made publicly available and reported as appropriate on a board member's personal financial statement.

CHAPTER 4. CONDUCT AND PUBLIC RELATIONS

The statutory citations for this chapter are the Texas Education Code, §7.108; the Texas Government Code, §305.006, and Chapter 572, Personal Financial Disclosure, Standards of Conduct, and Conflict of Interest; and the Texas Election Code, Chapter 251, General Provisions.

§4.1. Standards of Conduct and Conflicts of Interest.

- (a) Personal interest in board actions. Whenever a board member has a financial interest in any matter to be voted upon by the board, such a member shall state at an open meeting that he or she has such an interest in the matter and shall abstain from voting and discussion concerning the matter.
- (b) The Permanent School Fund ethics policy governs the conduct of State Board of Education members with respect to the investment and management of the Permanent School Fund.

§4.2. Press and Public Relations.

- (a) Prior to each State Board of Education meeting, the agenda shall be made available by agency staff to the capitol press corps; governor's office; Legislative Budget Board; Legislative Reference Library; School Land Board; Texas Higher Education Coordinating Board; regional education service centers; and state offices of professional education organizations which have requested the agenda.
- (b) A press table shall be provided at meetings of the State Board of Education and press representatives shall be supplied with copies of the official agenda for the meeting and other materials relating to specific agenda items.
- (c) The State Board of Education shall seek to maintain open relations with the press by answering reporters' questions frankly and by providing official statements through press releases and answers to follow-up inquiries.

§4.3. Disclosure of Campaign Contributions and Gifts.

- (a) Any person, corporation, or other legal entity which proposes to enter into a contract with or applies for a grant, contract, or charter which may be granted by the State Board of Education shall disclose whether, at any time in the preceding four years, the person, corporation, or other legal entity has made a campaign contribution to a candidate for or member of the State Board of Education. Disclosure shall be made in writing to the commissioner of education 14 calendar days prior to consideration by the board or any committee of a contract, grant, or charter.

- (b) A person, corporation, or other legal entity which proposes to enter into a contract with or applies for a grant, contract, or charter which may be granted by the State Board of Education shall disclose in the same manner any benefit conferred on a candidate for or member of the State Board of Education during the preceding four years. A benefit need not be disclosed if the aggregate value of benefits conferred on a candidate for or a member of the State Board of Education during the preceding four years does not exceed \$250, or a different limit set by §572.023(b)(7), Texas Government Code. This requirement applies whether or not the person, corporation, or other legal entity is required to report the expenditure to the Texas Ethics Commission. For purposes of this section, a benefit is not conferred if the candidate for or a member of the State Board of Education has paid for the member's own participation, as well as any participation by other persons for the direct benefit of any business in which the member has a substantial interest as defined under Texas Government Code §572.005 (1) - (7).
- (c) In this section:
- (1) "person, corporation, or other legal entity" includes:
 - (A) any individual who would have a "substantial interest" in the person, corporation, or other legal entity as that term is defined in Texas Government Code, §572.005 (1) - (6);
 - (B) an attorney, representative, registered lobbyist, employee, or other agent who receives payment for representing the interests of the person, firm, or corporation before the board or to board members, or whose duties are directly related to the contract, grant, or charter; or
 - (C) an individual related within the first degree by affinity or consanguinity, as determined under Chapter 573, Government Code, to the person covered by (c)(1).
 - (2) "contract, grant, or charter" means any application to enter into a contractual relationship with or otherwise receive funding from the State Board of Education, including without limitation contracts for investment advisors, consultants, or investment managers for the Permanent School Fund and applicants for charters to operate open enrollment charter schools.
 - (3) "campaign contribution" has the meaning defined in Texas Election Code, §251.001.
 - (4) "benefit" has the meaning defined in Texas Penal Code, §36.01.
 - (5) "candidate for or a member of the State Board of Education" includes a person related within the first degree of affinity or consanguinity, as determined under Chapter 573, Government Code, to a candidate for or a member of the State Board of Education.
- (d) A person, corporation, or other legal entity has a continuing duty to report contributions or expenditures made through the term of a contract, grant, or charter and shall within 21 calendar days notify the commissioner of education and the board chair upon making a contribution or expenditure covered by this section.

- (e) Failure to disclose a contribution or expenditure under this section shall be grounds for canceling or revoking the contract, grant, or charter in the discretion of the board. Only those contributions or expenditures made after the effective date of this rule are required to be disclosed.
- (f) This section does not affect the validity of contracts, grants, or charters existing on its effective date but does apply to the renewal or extension of any contract, grant, or charter.
- (g) Before distributing bids or applications for a contract with the board, staff will provide any disclosure made under subsection (a) or (b) to a board member to whom the disclosure applies. A board member shall have 10 calendar days to provide a written statement relating to the disclosure for distribution along with all disclosures.
- (h) An SBOE member shall on April 15 of each year submit a list of businesses that the SBOE member has a substantial interest in as defined in Texas Government Code §572.005 (1) - (7) and all DBAs or assumed names of any such businesses. If any change occurs in the identities of businesses that an SBOE member has a substantial interest in, the SBOE member shall submit an amendment within 30 calendar days of the date of such change. A person, corporation, or other legal entity which proposes to enter into a contract with or applies for a grant, contract, or charter that may be granted by the State Board of Education shall be provided the combined list of all board members and shall disclose any campaign contribution or benefit under subsections (a) or (b) on behalf of any business in which an SBOE member has a substantial interest.

§4.4. Instructional Materials Submitted to the Texas Resource Review.

- (a) An SBOE member shall not nominate instructional materials for submittal to the Texas Resource Review without a majority vote of the board endorsing said nomination.

CHAPTER 5. RULES AND THE RULEMAKING PROCESS

The statutory citation for this chapter is the Texas Government Code, Chapter 2001, Subchapter B; Texas Government Code, Chapter 2002, Subchapter B; Texas Education Code, §7.102(e)-(f).

§5.1. State Board of Education Rules.

- (a) An action of the board to adopt a rule under the Texas Education Code is effective only if the rule's preamble published in the *Texas Register* includes a statement of the specified statutory authority contained in the Texas Education Code to adopt the rule.
- (b) Rules submitted to the Office of the Secretary of State for publication in the *Texas Register* shall conform to requirements promulgated by the Secretary of State.

§5.2. Adoption, Amendment, and Repeal of State Board of Education Rules.

- (a) Proposed new rules, amendments, and repeals must appear on the agenda for discussion at one board meeting and for action at two subsequent board meetings as First Reading and Second Reading, unless a departure from this rulemaking process is approved by the board.
- (b) Each member of the board shall receive copies of the preliminary and official board meeting agendas containing all proposed new rules, amendments, or repeals to be considered.
- (c) The board can take action only if the rule is posted for action in the official notice of the meeting that is published in the *Texas Register*. The commissioner is authorized to file information with the Secretary of State to comply with the requirements of Texas Government Code, Chapter 2001, Subchapter B; and Texas Government Code, Chapter 2002, Subchapter B, regarding adoption of rules.
 - (1) **First Reading and Filing Authorization.** The board can authorize the commissioner to file a proposed new rule, amendment, or repeal with the Secretary of State for publication in the *Texas Register* as it appears in the agenda or with changes to the material presented in the agenda.
 - (2) **Second Reading and Final Adoption.** If the public comment period after filing the proposal with the Secretary of State has elapsed, the board can adopt a new rule, amendment, or repeal. If a board committee determines that a substantial revision of the material presented in the agenda shall be considered, the board shall not take final action before the next board meeting.
 - (3) **Withdrawal.** The board can authorize the commissioner to withdraw a proposed new rule, amendment, or repeal that was previously filed with the Secretary of State.
 - (4) **Refiling.** The board can authorize the commissioner to withdraw and refile a proposed new rule or amendment that was previously filed with the Secretary of State if there are substantive changes from the original filing.

- (d) The board can authorize the commissioner to conduct a public hearing on behalf of the State Board of Education concerning board rules. The public hearing shall be transcribed and the transcript made available for review by board members.
- (e) Except as otherwise provided by law, a rule does not take effect until the beginning of the school year that begins at least 90 days after the date of the rule adoption.
- (f) A rule may take effect earlier than the date set forth in subsection (e) if the rule's preamble specified an earlier date with the reason for the earlier date and:
 - (1) the earlier effective date is a requirement of:
 - (A) a federal law, or
 - (B) a state law that specifically refers to Texas Education Code §7.102 and expressly requires the adoption of an earlier effective date; or
 - (2) on an affirmative vote of two-thirds of the members of the board, the board makes a finding that an earlier effective date is necessary.

§5.3. Emergency Rules.

The board may adopt emergency rules without prior notice or hearing. Conditions under which emergency rules can be adopted and the periods for which they are effective are governed by Texas Government Code §2001.034. The board shall also comply with the requirements of Section 5.2(f) of these rules and the notice of emergency meeting requirements in Texas Government Code, §551.045. Emergency rules will be placed on a board agenda for adoption as a permanent rule.

§5.4. Filing Non-Substantive Rule Corrections with the Secretary of State.

The commissioner may approve and file with the Secretary of State non-substantive corrections to State Board of Education rules. Non-substantive rule corrections may only include typographical, grammatical, referencing, or spelling errors and technical edits to comply with *Texas Register* style and format requirements. The commissioner will provide a mark-up of any such corrections to the board.

§5.5. Rulemaking Authority.

Except for rules adopted under §5.4 of these rules (relating to Filing Non-Substantive Rule Corrections with the Secretary of State), or other exceptions specifically authorized by the board, all rules of the State Board of Education shall be approved by the State Board of Education.

§5.6. Review of the State Board of Education Rules.

In accordance with Texas Government Code, §2001.039, the State Board of Education shall review its rules every four years to assure that statutory authority for the rules continues to exist. If necessary, proposed amendments will be brought to the board following the procedure described in §5.2 of these rules

§5.7. Filing of Amendments.

A member wishing to amend any Texas Essential Knowledge and Skills (TEKS) being considered by the board for second reading and final adoption shall submit the amendment in writing to the staff no later than noon on the day prior to the final vote on the adoption of the TEKS. All amendments shall be made available to the public to the extent possible. This rule may be suspended by a two-thirds vote.

CHAPTER 6. ADVISORY GROUPS

The statutory citations for this chapter are the Texas Education Code, §§7.102(b), 29.254, 32.034, and 61.077.

§6.1. General Provisions.

- (a) The State Board of Education may establish a Committee of Investment Advisors (CIA) to the Permanent School Fund and approve all selected appointments. The CIA shall be composed of not more than 15 members, one appointed by each State Board of Education member, who each have considerable institutional investment expertise and are free from conflicts of interest. The CIA member will closely advise the individual State Board of Education member who appointed the member on all matters relative to the management of the Permanent School Fund as necessary. The CIA may meet in person or via conference call or telephone conference as needed. Duties and responsibilities of the CIA are within the *Texas Permanent School Fund - Investment Procedures Manual*, Section A.2.
- (b) If the board does not establish a CIA, nothing shall prevent a board member from selecting and working with an investment advisor in a manner consistent with federal and state laws and the Investment Procedures Manual.
- (c) Content advisors and work group members will be selected in accordance with the TEKS Review and Revision Process.

CHAPTER 7. NOMINATIONS FOR GUBERNATORIAL APPOINTMENTS

The statutory citations for this chapter are the Texas Government Code, §651.009(a) and §825.003, and Texas Natural Resources Code, §32.012.

§7.1. Gubernatorial Appointments.

Pursuant to statute, the State Board of Education shall submit to the Governor lists of citizens from which appointments are to be made for the boards described in this section: Teacher Retirement System Board of Trustees and School Land Board.

§7.2. Timelines.

The Chair and/or his or her designee shall work collaboratively with staff and the Governor's Appointments Office to establish appropriate timelines for the placement on the agenda to meet appointment timelines and that proper criteria is applied by the State Board of Education.

§7.3. Nominee Selection.

The board shall select nominees in such a manner as to facilitate adherence to diversity of appointments: "In each case in which the governing body of a state board, commission, or other state agency that has statewide jurisdiction is appointed by the governor or another appointing authority, the governor or appointing authority shall ensure that, to the extent possible, the membership of the governing body reflects the racial, ethnic, and geographic diversity of this state." (§651.009(a), Government Code)

§7.4. Teacher Retirement System.

The Governor shall appoint two members of the TRS board of trustees, subject to confirmation by two-thirds of the senate, from lists of nominees submitted by the State Board of Education. These persons must be persons who have demonstrated financial expertise, have worked in private business or industry, and have broad investment experience preferably in investment of pension funds (Government Code §825.003). The board selection process shall be as follows:

- (a) Each member shall be entitled to nominate one person who meets the criteria described in this section.
- (b) The Committee on School Finance/Permanent School Fund shall adopt an evaluation process using the criteria described in this rule, subject to approval of the board, and engage an impartial third party to evaluate candidates submitted by members.
- (c) The Committee shall recommend to the full board a slate of candidates for adoption. The list of nominees is subject to amendment by the board, but the final list must comply with statutory requirements.

§7.5. School Land Board.

The Governor shall appoint two members of the School Land Board, subject to confirmation by the senate, from lists of candidates submitted by the State Board of Education. One of the

members appointed by the governor must be a resident of a county with a population of less than 200,000.

- (a) The School Land Board duties as described in the Texas Natural Resources Code (§§32.061, 51.011, 51.413) are:
 - (1) manage and control any land, mineral or royalty interest, real estate investment, or other interest, including revenue received from those sources, that is set apart to the permanent school fund together with the mineral estate in riverbeds, channels, and the tidelands, including islands;
 - (2) acquire, sell, lease, trade, improve, maintain, protect, or otherwise manage, control, or use land, mineral and royalty interests, real estate investments, or other interests, including revenue received from those sources, that are set apart to the permanent school fund in any manner, at such prices, and under such terms and conditions as the board finds to be in the best interest of the fund;
 - (3) consult with the president, chairman, or other head of the department, board, or agency, as applicable, or with the representative of the head, on each matter before the board that affects land owned or held in trust for the use and benefit of a department, board, or agency of the state; and,
 - (4) make determinations as to the release of any funds to the available school fund or to the State Board of Education for investment in the permanent school fund.
- (b) Each member shall be entitled to nominate one person who meets the criteria described in this section.
- (c) The Committee on School Finance/Permanent School Fund shall adopt an evaluation process using the criteria described in this rule, subject to approval of the board, and engage an impartial third party to evaluate candidates submitted by members.
- (d) The Committee shall recommend to the full board a slate of candidates for adoption. The list of nominees is subject to amendment by the board, but the final list must comply with statutory requirements.

§7.6. Rules and Procedures.

The board may adopt additional rules and procedures related to these selection processes.

**Texas Permanent School Fund
Asset Allocation Mix - SBOE
September 30, 2021**

<u>Asset Class</u>	<u>Portfolio</u>	<u>Book Value</u>	<u>Mix</u>	<u>Fair Value</u>	<u>Mix</u>
Equity	Domestic Small-Mid Cap	\$ 1,555,458,332	5.35%	\$ 2,506,377,684	5.99%
	Domestic Large Cap	2,074,316,565	7.13%	5,700,781,089	13.67%
	Total Domestic Equity	3,629,774,897	12.48%	8,207,158,773	19.66%
	International Equity - Blackrock	4,357,206,465	14.97%	6,543,844,160	15.69%
	Emerging Market Equity - Navarro	820,737,541	2.82%	1,246,098,149	2.99%
	Total Public Market Equity	8,807,718,903	30.27%	15,997,101,082	38.34%
Fixed Income	Domestic Fixed Income	4,752,448,857	16.33%	4,807,850,532	11.53%
	Treasuries	1,354,947,374	4.66%	1,207,716,781	2.90%
	Investec Emerging Market Debt	1,237,768,787	4.25%	1,325,736,349	3.18%
	Ashmore Emerging Market Debt	1,241,588,811	4.27%	1,262,813,758	3.03%
	Total Emerging Market Debt	2,479,357,598	8.52%	2,588,550,107	6.21%
	Total Fixed Income	8,586,753,829	29.51%	8,604,117,420	20.64%
Absolute Return	Raven 1	609,920,655	2.10%	1,068,814,556	2.56%
	Raven 4	457,489,172	1.57%	893,433,648	2.14%
	Raven 6	297,031,407	1.02%	479,822,869	1.15%
	Raven 7	347,815,399	1.20%	546,743,886	1.31%
	Raven 8	442,127,587	1.52%	582,318,403	1.40%
	Total Absolute Return	2,154,384,220	7.41%	3,571,133,362	8.56%
Private Equity	Columbia NB Crossroads Fund L.P.	206,773,980	0.71%	269,708,476	0.65%
	Columbia NB Crossroads Fund II L.P.	281,215,232	0.97%	465,571,645	1.12%
	Columbia NB Crossroads Fund II Tranche C	704,796,172	2.42%	1,239,737,950	2.97%
	Columbia NB Crossroads Fund II Tranche D	902,375,580	3.10%	1,471,202,303	3.53%
	TPSF NB PE Program	756,885,622	2.60%	1,611,443,417	3.86%
	Private Equity Direct	1,649,032,932	5.67%	2,522,232,335	6.05%
	Columbia CS Fund, L.P.	156,236,598	0.54%	247,688,074	0.59%
	Total Private Equity	4,657,316,116	16.01%	7,827,584,200	18.77%
Real Estate	Direct Real Estate Investments	3,030,778,238	10.42%	3,750,789,404	8.99%
	Total Real Estate	3,030,778,238	10.42%	3,750,789,404	8.99%
Real Return	Real Return - TIPS	1,161,626,691	3.99%	1,239,752,567	2.97%
	Real Return Commodities - Terlingua 3	426,255,129	1.46%	448,097,660	1.07%
	Total Real Return	1,587,881,820	5.45%	1,687,850,227	4.04%
Total Unallocated Cash		273,361,958	0.93%	273,361,958	0.66%
Fund Total		29,098,195,084	100.00%	41,711,937,653	100.00%

The asset classes include cash that has been allocated to the investment portfolios. Exposure includes fair value of funded investments plus unfunded commitments.

Notes:

Total Private Equity Exposure and Percentage of Fund Total Fair Value	10,218,547,210	24.50%
Total Real Estate Exposure and Percentage of Fund Total Fair Value	5,935,734,851	14.23%

Exposure:

Current State Board of Education approved Strategic Asset Allocation Mix (approved July 2, 2020)

Large Cap U.S. Equity	14.00%	U.S. Treasuries	3.00%
Small/Mid Cap U.S. Equity	6.00%	Absolute Return	7.00%
Developed and Emerging Market International Large Cap	14.00%	Private Equity	15.00%
Emerging Market Equity	3.00%	Real Estate	11.00%
Core Bonds	12.00%	Emerging Manager Program	1.00%
High Yield Bonds	3.00%	Real Return (Commodities)	1.00%
Emerging Market Debt (Local Currency)	7.00%	Real Return (TIPS)	3.00%
			100.00%

2021-2025 Rule Review Plan for State Board of Education Rules

STATE BOARD OF EDUCATION: INFORMATION

SUMMARY: This item outlines the rule review plan for State Board of Education (SBOE) rules during the period of September 2021 through August 2025. Texas Government Code (TGC), §2001.039, requires an ongoing four-year rule review of existing state agency rules, including SBOE rules. The rule review requirement in TGC, §2001.039, is designed to ensure that the reason for initially adopting or readopting a rule continues to exist.

BACKGROUND INFORMATION AND JUSTIFICATION: Senate Bill 178, 76th Texas Legislature, 1999, amended the TGC by adding §2001.039, which requires the review of existing state agency rules. The rule review requirement in TGC, §2001.039, is designed to ensure that the reason for adopting or readopting the rule continues to exist.

The 2021-2025 SBOE rule review plan reflected in Attachment I repeats the cycle of review that was conducted during the 2017-2021 SBOE rule review period with the addition of new rules that took effect subsequent to the adoption of that plan and the removal of rules that were repealed. The 2021-2025 plan, approved by the SBOE in June 2021, is the seventh rule review cycle of SBOE rules. In accordance with Texas Education Code, §28.002(m), and as was the case with previous rule review plans, the Texas Essential Knowledge and Skills (TEKS) are exempt from the rule review requirement and are not included in the 2021-2025 rule review plan. Although the TEKS will not be reviewed as part of the rule review process, the SBOE conducts a review of the curriculum content on a schedule determined by the SBOE.

The 2021-2025 rule review plan for SBOE rules will appear on an ongoing basis in the information pages of the SBOE agenda. Any necessary modifications to the plan will also appear in the information pages of the SBOE agenda. The rule review plan will also be posted on the agency's website and updated if necessary.

Rule Review Procedures. Secretary of State rules specify the following two-step review process to implement the rule review requirement in TGC, §2001.039:

1. a Notice of Proposed Review (Intention to review) that announces a public comment period for comments on whether the reason for adopting or readopting the rules continues to exist (see example in Attachment II); and
2. a Notice of Adopted Review (Readoption) that summarizes the public comments received, if any, in response to the notice of proposed review and provides a response to each comment (see examples in Attachment II).

The rule review process for SBOE rules is illustrated in this item using three examples that present the following points: (1) if no amendments are recommended to rules under review, the item presenting the adoption of the review will complete the rule review process and no further action will be necessary; and (2) if amendments are recommended to rules under review, the item presenting the adoption of the review will complete the rule review process and the amendments will be presented as a separate item under the standard rulemaking process.

Example 1. Rule Review with No Changes

January SBOE Meeting	SBOE Committee (discussion)	Discussion item that briefly describes the rule and specifies that no changes are being recommended.
	Texas Register	After the SBOE meeting, staff files Notice of Proposed Review (see Attachment II).
April SBOE Meeting	SBOE Committee and Full SBOE	Action item that presents a summary of comments received, if any, from Notice of Proposed Review. The SBOE authorizes filing the Notice of Adopted Review, noting that no changes are being proposed to the rule as a result of the review.
	Texas Register	After the SBOE meeting, staff files Notice of Adopted Review that states the rule will continue to exist without changes (see Attachment II).
END OF REVIEW PROCESS (no item at June SBOE Meeting)		

Example 2. Rule Review with Changes

January SBOE Meeting	SBOE Committee (discussion)	Discussion item that briefly describes the rule, outlines issues to be considered, and specifies anticipated changes to the rule.
	Texas Register	After the SBOE meeting, staff files Notice of Proposed Review (see Attachment II).
April SBOE Meeting	SBOE Committee and Full SBOE (first reading)	Separate action items are included in the agenda: one that presents comments received, if any, from Notice of Proposed Review and one that provides the SBOE the opportunity to propose amendments. The SBOE authorizes filing the Notice of Adopted Review and approves the proposed amendments for first reading and filing authorization.
	Texas Register	After the SBOE meeting, staff files proposed amendments and the Notice of Adopted Review that states the rule will continue to exist and changes are being proposed (see Attachment II).
END OF REVIEW PROCESS		
June SBOE Meeting	SBOE Committee and Full SBOE (second reading)	Action item that presents the proposed amendments for second reading and final adoption. Item includes a summary of comments, if any, on proposed amendments.
	Texas Register	After the SBOE meeting, staff files adopted amendments.
END OF AMENDMENT PROCESS		

Example 3. Repeal of Rule under Review

January SBOE Meeting	SBOE Committee (first reading)	Action item that presents the proposed repeal of rule. SBOE approves proposed repeal for first reading and filing authorization.
	Texas Register	After the SBOE meeting, staff files proposed repeal. No Notice of Proposed Review required for repeals.
April SBOE Meeting	SBOE Committee and Full SBOE (second reading)	Action item that presents the proposed repeal of rule for second reading and final adoption.
	Texas Register	After the SBOE meeting, staff files adopted repeal.
END OF REPEAL PROCESS		

Staff Members Responsible:

Cristina De La Fuente-Valadez, Director, Rulemaking

Lynette Smith, Program Specialist, Rulemaking

Attachment I:

2021-2025 Rule Review Plan for State Board of Education Rules

Attachment II:

Sample Notices of Proposed Review and Adopted Review

ATTACHMENT I

2021-2025 Rule Review Plan for State Board of Education Rules (Approved June 25, 2021)

Texas Government Code, §2001.039, requires a four-year rule review cycle for all state agency rules, including State Board of Education (SBOE) rules. The rule review is designed to ensure that the reason for adopting or readopting the rule continues to exist. It only includes rules currently in effect at the time the plan is adopted.

Texas Education Code, §28.002(m), exempts the Texas Essential Knowledge and Skills (TEKS) from the rule review requirement; accordingly, this rule review plan does not include the rule chapters for the TEKS. Although the rules will not be reviewed as part of the rule review process, the SBOE conducts a review of the TEKS on a schedule determined by the SBOE.

Review Period: September 2021–August 2022			
Chapter Title	Subchapter Title	Topic	Begin Review
Chapter 74. Curriculum Requirements	<i>Subchapter A. Required Curriculum</i>	Curriculum	September 2021
	<i>Subchapter B. Graduation Requirements</i>		
	<i>Subchapter C. Other Provisions</i>		
	<i>Subchapter D. Graduation Requirements, Beginning with School Year 2001-2002</i>		
	<i>Subchapter E. Graduation Requirements, Beginning with School Year 2004-2005</i>		
	<i>Subchapter F. Graduation Requirements, Beginning with School Year 2007-2008</i>		
	<i>Subchapter G. Graduation Requirements, Beginning with School Year 2012-2013</i>		
Chapter 89. Adaptations for Special Populations	<i>Subchapter A. Gifted/Talented Education</i>	Special Populations	January 2022
	<i>Subchapter C. Texas Certificate of High School Equivalency</i>		
	<i>Subchapter D. Special Education Services and Settings</i>		
Chapter 61. School Districts	<i>Subchapter A. Board of Trustees Relationship</i>	Administration	April 2022
	<i>Subchapter B. Special Purpose School Districts</i>		

Review Period: September 2022–August 2023			
Chapter Title	Subchapter Title	Topic	Begin Review
Chapter 129. Student Attendance	<i>Subchapter A. Student Attendance Allowed</i>	Finance	January 2023
	<i>Subchapter B. Student Attendance Accounting</i>		
Chapter 157. Hearings and Appeals	<i>Subchapter A. General Provisions for Hearings Before the State Board of Education</i>	Personnel	January 2023
	<i>Subchapter D. Independent Hearing Examiners</i>		

Review Period: September 2023–August 2024			
Chapter Title	Subchapter Title	Topic	Begin Review
Chapter 33. Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund	<i>Subchapter A. State Board of Education Rules</i>	Finance	September 2023
Chapter 66. State Adoption and Distribution of Instructional Materials	<i>Subchapter A. General Provisions</i>	Instructional Materials	November 2023
	<i>Subchapter B. State Adoption of Instructional Materials</i>		
	<i>Subchapter C. Local Operations</i>		
Chapter 100. Charters	<i>Subchapter A. Open-Enrollment Charter Schools</i>	Charter Schools	January 2024
	<i>Subchapter B. Home-Rule School District Charters</i>		

Review Period: September 2024–August 2025			
Chapter Title	Subchapter Title	Topic	Begin Review
Chapter 30. Administration	<i>Subchapter A. State Board of Education: General Provisions</i>	Administration	November 2024
	<i>Subchapter B. State Board of Education: Purchasing and Contracts</i>		
Chapter 101. Assessment	<i>Subchapter A. General Provisions</i>	Assessment	January 2025
	<i>Subchapter B. Implementation of Assessments</i>		
	<i>Subchapter C. Local Option</i>		
Chapter 109. Budgeting, Accounting, and Auditing	<i>Subchapter A. Budgeting, Accounting, Financial Reporting, and Auditing for School Districts</i>	Finance	January 2025
	<i>Subchapter B. Texas Education Agency Audit Functions</i>		
	<i>Subchapter C. Adoptions by Reference</i>		
	<i>Subchapter D. Uniform Bank Bid or Request for Proposal and Depository Contract</i>		

SAMPLES

Attachment II

Notice of Proposed Review (Intention to review)

The State Board of Education (SBOE) proposes the review of 19 Texas Administrative Code (TAC) Chapter 30, Administration, pursuant to Texas Government Code (TGC), §2001.039. The rules being reviewed by the SBOE in 19 TAC Chapter 30 are organized under the following subchapters: Subchapter A, State Board of Education: General Provisions, and Subchapter B, State Board of Education: Purchasing and Contracts.

As required by TGC, §2001.039, the SBOE will accept comments as to whether the reasons for adopting 19 TAC Chapter 30, Subchapters A and B, continue to exist.

The public comment period on the review begins December 18, 2020, and ends at 5:00 p.m. on January 22, 2021. A form for submitting public comments on the proposed rule review is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_\(TAC\)/State_Board_of_Education_Rule_Review](https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_(TAC)/State_Board_of_Education_Rule_Review). The SBOE will take registered oral and written comments on the review at the appropriate committee meeting in January 2021 in accordance with the SBOE board operating policies and procedures.

Notice of Adopted Review (with no changes to rule) (Readoption)

The State Board of Education (SBOE) adopts the review of 19 Texas Administrative Code (TAC) Chapter 30, Administration, pursuant to Texas Government Code, §2001.039. The rules in 19 TAC Chapter 30 are organized under the following subchapters: Subchapter A, State Board of Education: General Provisions, and Subchapter B, State Board of Education: Purchasing and Contracts. The SBOE proposed the review of 19 TAC Chapter 30, Subchapters A and B, in the December 18, 2020 issue of the *Texas Register* (45 TexReg 9253).

The SBOE finds that the reasons for adopting 19 TAC Chapter 30, Subchapters A and B, continue to exist and readopts the rules. The SBOE received no comments related to the review.

No changes are necessary as a result of the review.

**Notice of Adopted Review (with changes to rule)
(Readoption with changes)**

The State Board of Education (SBOE) adopts the review of 19 Texas Administrative Code (TAC) Chapter 30, Administration, pursuant to Texas Government Code (TGC), §2001.039. The rules in 19 TAC Chapter 30 are organized under the following subchapters: Subchapter A, State Board of Education: General Provisions, and Subchapter B, State Board of Education: Purchasing and Contracts. The SBOE proposed the review of 19 TAC Chapter 30, Subchapters A and B, in the December 18, 2020 issue of the *Texas Register* (45 TexReg 9253).

Relating to the review of 19 TAC Chapter 30, Subchapter A, the SBOE finds that the reasons for adopting Subchapter A continue to exist and readopts the rule. The SBOE received no comments related to the review of Subchapter A. As a result of the review, the SBOE approved a proposed amendment to 19 TAC §30.1, which can be found in the Proposed Rules section of this issue. The proposed amendment would update the SBOE petition procedures to allow for electronic submission of a petition authorized under TGC, §2001.021.

Relating to the review of 19 TAC Chapter 30, Subchapter B, the SBOE finds that the reasons for adopting Subchapter B continue to exist and readopts the rules. The SBOE received no comments related to the review of Subchapter B. No changes are necessary as a result of the review.

STATUTORY AUTHORITY REFERENCE SECTION:

TEXAS CONSTITUTION ARTICLE VII

TEXAS EDUCATION CODE (TEC)

TEXAS GOVERNMENT CODE (TGC)

TEXAS OCCUPATIONS CODE (TOC)

NATURAL RESOURCES CODE (NRC)

THE TEXAS CONSTITUTION
ARTICLE 7. EDUCATION
SECTION 2

Sec. 2. PERMANENT SCHOOL FUND.

All funds, lands and other property heretofore set apart and appropriated for the support of public schools; all the alternate sections of land reserved by the State out of grants heretofore made or that may hereafter be made to railroads or other corporations of any nature whatsoever; one half of the public domain of the State; and all sums of money that may come to the State from the sale of any portion of the same, shall constitute a permanent school fund.

Sec. 2A. RELEASE OF STATE CLAIM TO CERTAIN LANDS AND MINERALS WITHIN SHELBY, FRAZIER, AND MCCORMICK LEAGUE AND IN BASTROP COUNTY.

- (a) The State of Texas hereby relinquishes and releases any claim of sovereign ownership or title to an undivided one-third interest in and to the lands and minerals within the Shelby, Frazier, and McCormick League (now located in Fort Bend and Austin counties) arising out of the interest in that league originally granted under the Mexican Colonization Law of 1823 to John McCormick on or about July 24, 1824, and subsequently voided by the governing body of Austin's Original Colony on or about December 15, 1830.
- (b) The State of Texas relinquishes and releases any claim of sovereign ownership or title to an interest in and to the lands, excluding the minerals, in Tracts 2-5, 13, 15-17, 19-20, 23-26, 29-32, and 34-37, in the A. P. Nance Survey, Bastrop County, as said tracts are:
 - (1) shown on Bastrop County Rolled Sketch No. 4, recorded in the General Land Office on December 15, 1999; and
 - (2) further described by the field notes prepared by a licensed state land surveyor of Travis County in September through November 1999 and May 2000.
- (c) Title to such interest in the lands and minerals described by Subsection (a) is confirmed to the owners of the remaining interests in such lands and minerals. Title to the lands, excluding the minerals, described by Subsection (b) is confirmed to the holder of record title to each tract. Any outstanding land award or land payment obligation owed to the state for lands described by Subsection (b) is canceled, and any funds previously paid related to an outstanding land award or land payment obligation may not be refunded.
- (d) The General Land Office shall issue a patent to the holder of record title to each tract described by Subsection (b). The patent shall be issued in the same manner as other patents except that no filing fee or patent fee may be required.
- (e) A patent issued under Subsection (d) shall include a provision reserving all mineral interest in the land to the state.
- (f) This section is self-executing.

Sec. 2B. AUTHORITY TO RELEASE STATE'S INTEREST IN CERTAIN PERMANENT SCHOOL FUND LAND HELD BY PERSON UNDER COLOR OF TITLE.

- (a) The legislature by law may provide for the release of all or part of the state's interest in land, excluding mineral rights, if:
 - (1) the land is surveyed, unsold, permanent school fund land according to the records of the General Land Office;
 - (2) the land is not patentable under the law in effect before January 1, 2002; and
 - (3) the person claiming title to the land:

THE TEXAS CONSTITUTION
ARTICLE 7. EDUCATION
SECTION 2

- (A) holds the land under color of title;
 - (B) holds the land under a chain of title that originated on or before January 1, 1952;
 - (C) acquired the land without actual knowledge that title to the land was vested in the State of Texas;
 - (D) has a deed to the land recorded in the appropriate county; and
 - (E) has paid all taxes assessed on the land and any interest and penalties associated with any period of tax delinquency.
- (b) This section does not apply to:
- (1) beach land, submerged or filled land, or islands; or
 - (2) land that has been determined to be state-owned by judicial decree.
- (c) This section may not be used to:
- (1) resolve boundary disputes; or
 - (2) change the mineral reservation in an existing patent.

Sec. 2C. RELEASE OF STATE CLAIM TO CERTAIN LANDS IN UPSHUR AND SMITH COUNTIES.

- (a) Except as provided by Subsection (b) of this section, the State of Texas relinquishes and releases any claim of sovereign ownership or title to an interest in and to the tracts of land, including mineral rights, described as follows:

Tract 1:

The first tract of land is situated in Upshur County, Texas, about 14 miles South 30 degrees east from Gilmer, the county seat, and is bounded as follows: Bound on the North by the J. Manning Survey, A-314 the S.W. Beasley Survey A-66 and the David Meredith Survey A-315 and bound on the East by the M. Mann Survey, A-302 and by the M. Chandler Survey, A-84 and bound on the South by the G. W. Hooper Survey, A-657 and by the D. Ferguson Survey, A-158 and bound on the West by the J. R. Wadkins Survey, A-562 and the H. Alsup Survey, A-20, and by the W. Bratton Survey, A-57 and the G. H. Burroughs Survey, A-30 and the M. Tidwell Survey, A-498 of Upshur County, Texas.

Tract 2:

The second tract of land is situated in Smith County, Texas, north of Tyler and is bounded as follows: on the north and west by the S. Leeper A-559, the Frost Thorn Four League Grant A-3, A-9, A-7, A-19, and the H. Jacobs A-504 and on the south and east by the following surveys: John Carver A-247, A. Loverly A-609, J. Gimble A-408, R. Conner A-239, N.J. Blythe A-88, N.J. Blythe A-89, J. Choate A-195, Daniel Minor A-644, William Keys A-527, James H. Thomas A-971, Seaborn Smith A-899, and Samuel Leeper A-559.

- (b) This section does not apply to:
- (1) any public right-of-way, including a public road right-of-way, or related interest owned by a governmental entity;
 - (2) any navigable waterway or related interest owned by a governmental entity; or
 - (3) any land owned by a governmental entity and reserved for public use, including a park, recreation area, wildlife area, scientific area, or historic site.
- (c) This section is self-executing.

THE TEXAS CONSTITUTION
ARTICLE 7. EDUCATION
SECTION 5

Sec. 5. PERMANENT SCHOOL FUND AND AVAILABLE SCHOOL FUND: COMPOSITION, MANAGEMENT, USE, AND DISTRIBUTION.

- (a) The permanent school fund consists of all land appropriated for public schools by this constitution or the other laws of this state, other properties belonging to the permanent school fund, and all revenue derived from the land or other properties. The available school fund consists of the distributions made to it from the total return on all investment assets of the permanent school fund, the taxes authorized by this constitution or general law to be part of the available school fund, and appropriations made to the available school fund by the legislature. The total amount distributed from the permanent school fund to the available school fund:
- (1) in each year of a state fiscal biennium must be an amount that is not more than six percent of the average of the market value of the permanent school fund, excluding real property belonging to the fund that is managed, sold, or acquired under Section 4 of this article, but including discretionary real assets investments and cash in the state treasury derived from property belonging to the fund, on the last day of each of the 16 state fiscal quarters preceding the regular session of the legislature that begins before that state fiscal biennium, in accordance with the rate adopted by:
- (A) a vote of two-thirds of the total membership of the State Board of Education, taken before the regular session of the legislature convenes; or
- (B) the legislature by general law or appropriation, if the State Board of Education does not adopt a rate as provided by Paragraph (A) of this subdivision; and
- (2) over the 10-year period consisting of the current state fiscal year and the nine preceding state fiscal years may not exceed the total return on all investment assets of the permanent school fund over the same 10-year period.
- (b) The expenses of managing permanent school fund land and investments shall be paid by appropriation from the permanent school fund.
- (c) The available school fund shall be applied annually to the support of the public free schools. Except as provided by this section, the legislature may not enact a law appropriating any part of the permanent school fund or available school fund to any other purpose. The permanent school fund and the available school fund may not be appropriated to or used for the support of any sectarian school. The available school fund shall be distributed to the several counties according to their scholastic population and applied in the manner provided by law.

- (d) The legislature by law may provide for using the permanent school fund to guarantee bonds issued by school districts or by the state for the purpose of making loans to or purchasing the bonds of school districts for the purpose of acquisition, construction, or improvement of instructional facilities including all furnishings thereto. If any payment is required to be made by the permanent school fund as a result of its guarantee of bonds issued by the state, an amount equal to this payment shall be immediately paid by the state from the treasury to the permanent school fund. An amount owed by the state to the permanent school fund under this section shall be a general obligation of the state until paid. The amount of bonds authorized hereunder shall not exceed \$750 million or a higher amount authorized by a two-thirds record vote of both houses of the legislature. If the proceeds of bonds issued by the state are used to provide a loan to a school district and the district becomes delinquent on the loan payments, the amount of the delinquent payments shall be offset against state aid to which the district is otherwise entitled.
- (e) The legislature may appropriate part of the available school fund for administration of a bond guarantee program established under this section.
- (f) Notwithstanding any other provision of this constitution, in managing the assets of the permanent school fund, the State Board of Education may acquire, exchange, sell, supervise, manage, or retain, through procedures and subject to restrictions it establishes and in amounts it considers appropriate, any kind of investment, including investments in the Texas growth fund created by Article XVI, Section [70](#), of this constitution, that persons of ordinary prudence, discretion, and intelligence, exercising the judgment and care under the circumstances then prevailing, acquire or retain for their own account in the management of their affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital.
- (g) Notwithstanding any other provision of this constitution or of a statute, the State Board of Education, the General Land Office, or another entity that has responsibility for the management of revenues derived from permanent school fund land or other properties may, in its sole discretion and in addition to other distributions authorized under this constitution or a statute, distribute to the available school fund each year revenue derived during that year from the land or properties, not to exceed \$600 million by each entity each year.

(Amended Aug. 11, 1891, and Nov. 3, 1964; Subsec. (a) amended and (b) and (c) added Nov. 8, 1983; Subsec. (d) added Nov. 8, 1988; Subsec. (b) amended Nov. 7, 1989; Subsec. (a) amended, a new (b) added, a portion of (a) redesignated as (c), former (b) and (c) amended, former (b)-(d) redesignated as (d)-(f), and (g) and (h) added Sept. 13, 2003; former Subsec. (g) and Subsec. (h) expired Dec. 1, 2006; Subsec. (a) amended and current Subsec. (g) added Nov. 8, 2011; Subsec. (g) amended Nov. 5, 2019.)

NATURAL RESOURCES CODE
TITLE 2. PUBLIC DOMAIN
SUBTITLE D. DISPOSITION OF THE PUBLIC DOMAIN
CHAPTER 51. LAND, TIMBER, AND SURFACE RESOURCES
SUBCHAPTER I. ACQUISITION OF PUBLIC SCHOOL LAND

NRC, §51.414. PERMANENT SCHOOL FUND LIQUID ACCOUNT.

- (a) The permanent school fund liquid account is established as an account in the permanent school fund in the State Treasury to be used by the board and the State Board of Education as provided by this section.
- (b) Each quarter, the board shall hold a meeting and adopt a resolution to release from the real estate special fund account funds designated under Section [51.401](#) that are not being used for a purpose listed in Section [51.402\(a\)](#) and are not required for the board's anticipated cash needs for the 90-day period following the date of the meeting, to be deposited to the credit of the permanent school fund liquid account in the State Treasury.
- (c) The State Board of Education may invest funds in the permanent school fund liquid account. The investments may be made only in liquid assets, in the same manner that the permanent school fund is managed by the State Board of Education.
- (d) Investment income and realized capital gains derived from funds in the permanent school fund liquid account shall be deposited in the State Treasury to the credit of the State Board of Education for investment in the permanent school fund. This subsection does not require a deposit if the market value of the assets held in the permanent school fund liquid account is below cost.
- (e) The State Board of Education may use funds in the permanent school fund liquid account to pay for administrative costs associated with implementing this section, including costs associated with contracts for professional investment management, investment advisory services, or custodial services.
- (f) The board shall provide to the State Board of Education in each quarterly report required by Section [32.068](#) the board's anticipated cash needs for the six-month period following the date of the report, to allow the State Board of Education to ensure that the board's cash needs may be met as provided by Subsection (g).
- (g) Not later than the fifth business day after the date of a request of the board, the State Board of Education shall release from the permanent school fund liquid account funds to be deposited to the credit of the real estate special fund account in the State Treasury in an amount requested by the board.

Added by Acts 2019, 86th Leg., R.S., Ch. 493 (H.B. [4388](#)), Sec. 4, eff. September 1, 2019.

Repealed by Acts 2021, 87th Leg., R.S., Ch. 875 (S.B. [1232](#)), Sec. 2.10(4), eff. December 31, 2022.

AN ACT

relating to the management and investment of the permanent school fund, including authorizing the creation of the Texas Permanent School Fund Corporation to manage and invest the fund and limiting the authority of the School Land Board to manage and invest the fund if the corporation is created.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

ARTICLE 1. STATE BOARD OF EDUCATION'S MANAGEMENT OF PERMANENT SCHOOL FUND

SECTION 1.01. Sections 43.001 , 43.002 , 43.003 , 43.0031 , 43.0032 , 43.0033 , 43.0034 , 43.004 , 43.005 , 43.0051 , 43.006 , 43.007 , 43.009 , 43.010 , 43.011 , 43.012 , 43.013 , 43.014 , 43.015 , 43.016 , 43.017 , 43.018 , 43.019 , and 43.020 , Education Code, are redesignated as Subchapter A, Chapter 43 , Education Code, and a heading for Subchapter A is added to read as follows:

SUBCHAPTER A. GENERAL PROVISIONS

SECTION 1.02. Section 43.001 (a), Education Code, is amended to read as follows:

(a) Except as provided by Subsection (b), the permanent school fund, which is a perpetual endowment for the public schools of this state, consists of:

- (1) all land appropriated for the public schools by the constitution and laws of this state;
- (2) all of the unappropriated public domain remaining

1 in this state, including all land recovered by the state by suit or
2 otherwise except pine forest land as described ~~[defined]~~ by Section
3 88.111 and property described by Section 12.128 ;

4 (3) all proceeds from the authorized sale of permanent
5 school fund land;

6 (4) all proceeds from the lawful sale of any other
7 properties belonging to the permanent school fund;

8 (5) all investments authorized by Section 43.003 of
9 assets ~~[properties]~~ belonging to the permanent school fund; and

10 (6) all income from the mineral development of
11 permanent school fund land, including income from mineral
12 development of riverbeds and other submerged land.

13 SECTION 1.03. Section 43.003 , Education Code, is amended to
14 read as follows:

15 Sec. 43.003. INVESTMENT OF PERMANENT SCHOOL FUND. The ~~[In~~
16 ~~compliance with this section, the]~~ State Board of Education may
17 invest the permanent school fund as authorized by Section 5(f),
18 Article VII, Texas Constitution ~~[in the types of securities, which~~
19 ~~must be carefully examined by the State Board of Education and be~~
20 ~~found to be safe and proper investments for the fund as specified~~
21 ~~below:~~

22 [~~(1) securities, bonds, or other obligations issued,~~
23 ~~insured, or guaranteed in any manner by the United States~~
24 ~~Government or any of its agencies and in bonds issued by this state,~~

25 [~~(2) obligations and pledges of The University of~~
26 ~~Texas,~~

27 [~~(3) corporate bonds, debentures, or obligations of~~

1 ~~United States corporations of at least "A" rating,~~

2 ~~[(4) obligations of United States corporations that~~
3 ~~mature in less than one year and are of the highest rating available~~
4 ~~at the time of investment;~~

5 ~~[(5) bonds issued, assumed, or guaranteed by the~~
6 ~~Inter American Development Bank, the International Bank of~~
7 ~~Reconstruction and Development (the World Bank), the African~~
8 ~~Development Bank, the Asian Development Bank, and the International~~
9 ~~Finance Corporation;~~

10 ~~[(6) bonds of counties, school districts,~~
11 ~~municipalities, road precincts, drainage, irrigation, navigation,~~
12 ~~and levee districts in this state, subject to the following~~
13 ~~requirements:~~

14 ~~[(A) the securities, before purchase, must have~~
15 ~~been diligently investigated by the attorney general both as to~~
16 ~~form and as to legal compliance with applicable laws;~~

17 ~~[(B) the attorney general's certificate of~~
18 ~~validity procured by the party offering the bonds, obligations, or~~
19 ~~pledges must accompany the securities when they are submitted for~~
20 ~~registration to the comptroller, who must preserve the~~
21 ~~certificates;~~

22 ~~[(C) the public securities, if purchased, and~~
23 ~~when certified and registered as specified under Paragraph (B), are~~
24 ~~incontestable unless issued fraudulently or in violation of a~~
25 ~~constitutional limitation, and the certificates of the attorney~~
26 ~~general are prima facie evidence of the validity of the bonds and~~
27 ~~bond coupons; and~~

1 ~~[(D) after the issuing political subdivision has~~
2 ~~received the proceeds from the sales of the securities, the issuing~~
3 ~~agency is estopped to deny their validity, and the securities are~~
4 ~~valid and binding obligations;—~~

5 ~~[(7) preferred stocks and common stocks that the State~~
6 ~~Board of Education considers proper investments for the permanent~~
7 ~~school fund, subject to the following requirements:—~~

8 ~~[(A) in making all of those investments, the~~
9 ~~State Board of Education shall exercise the judgment and care under~~
10 ~~the circumstances then prevailing that persons of ordinary~~
11 ~~prudence, discretion, and intelligence exercise in the management~~
12 ~~of their own affairs, not in regard to speculation but in regard to~~
13 ~~the permanent disposition of their funds, considering the probable~~
14 ~~income as well as the probable safety of their capital;—~~

15 ~~[(B) the company issuing the stock must be~~
16 ~~incorporated in the United States, and the stocks must have paid~~
17 ~~dividends for five consecutive years or longer immediately before~~
18 ~~the date of purchase and the stocks, except for bank stocks and~~
19 ~~insurance stocks, must be listed on an exchange registered with the~~
20 ~~Securities and Exchange Commission or its successors;— and~~

21 ~~[(C) not more than one percent of the permanent~~
22 ~~school fund may be invested in stock issued by one corporation and~~
23 ~~not more than five percent of the voting stock of any one~~
24 ~~corporation will be owned;— and~~

25 ~~[(8) notwithstanding any other law or provision of~~
26 ~~this code, first lien real estate mortgage securities insured by~~
27 ~~the Federal Housing Administration under the National Housing Act~~

1 ~~of the United States, or in any other first lien real estate~~
2 ~~mortgage securities guaranteed in whole or in part by the United~~
3 ~~States].~~

4 SECTION 1.04. Section 43.0033 , Education Code, is amended
5 to read as follows:

6 Sec. 43.0033. REPORTS OF EXPENDITURES. A consultant,
7 advisor, broker, or other person providing services to the State
8 Board of Education relating to the management and investment of the
9 permanent school fund shall file with the board regularly, as
10 determined by the board, a report that describes in detail any
11 expenditure of more than \$50 made by the person on behalf of:

- 12 (1) a member of the board;
13 (2) the commissioner; or
14 (3) an employee of the agency ~~[or of a nonprofit~~
15 ~~corporation created under Section 43.006]~~.

16 SECTION 1.05. Section 43.006 (a), Education Code, is amended
17 to read as follows:

18 (a) The State Board of Education may delegate investment
19 authority for the investment of the permanent school fund to the
20 Texas Permanent School Fund Corporation as provided by Subchapter B
21 ~~[same extent as an institution with respect to an institutional~~
22 ~~fund under Chapter 163 , Property Code]~~.

23 SECTION 1.06. Chapter 43 , Education Code, is amended by
24 adding Subchapter B to read as follows:

25 SUBCHAPTER B. TEXAS PERMANENT SCHOOL FUND CORPORATION

26 Sec. 43.051. DEFINITIONS. In this subchapter:

- 27 (1) "Board of directors" means the board of directors

1 of the corporation.

2 (2) "Chief executive officer" means the chief
3 executive officer of the corporation employed under Section 43.054.

4 (3) "Corporation" means the Texas Permanent School
5 Fund Corporation.

6 Sec. 43.052. CREATION OF CORPORATION. (a) The State Board
7 of Education may incorporate the Texas Permanent School Fund
8 Corporation and delegate to the corporation the board 's authority
9 to manage and invest:

10 (1) the permanent school fund under Section 43.003 ;
11 and

12 (2) the charter district bond guarantee reserve fund
13 under Section 45.0571 .

14 (b) The State Board of Education shall adopt the initial
15 articles of incorporation for the corporation.

16 (c) The corporation is a special-purpose governmental
17 corporation and instrumentality of the state with necessary and
18 implied powers to accomplish its purpose. The corporation is
19 subject to regulation and limitation only as provided by this
20 subchapter.

21 Sec. 43.053. BOARD OF DIRECTORS; MEETINGS. (a) The board
22 of directors is composed of the following nine members:

23 (1) five members of the State Board of Education,
24 appointed by the board in accordance with board policy;

25 (2) the commissioner of the General Land Office;

26 (3) one member appointed by the commissioner of the
27 General Land Office who has substantial background and expertise in

1 investments and asset management; and

2 (4) two members appointed by the governor, with the
3 advice and consent of the senate, each of whom must have substantial
4 background and expertise in investments and asset management and
5 may not be members of the State Board of Education or the School
6 Land Board.

7 (b) The State Board of Education by rule shall establish the
8 terms of members of the board of directors appointed under
9 Subsection (a)(1).

10 (c) Members of the board of directors appointed under
11 Subsections (a)(3) and (4) serve staggered six-year terms, with the
12 term of one member expiring on January 1 of each odd-numbered year.

13 (d) The initial members described by Subsection (c) shall
14 determine by lot which one of the initial members will serve a term
15 expiring January 1 of the first odd-numbered year following the
16 establishment of the corporation, which one of the initial members
17 will serve a term expiring January 1 of the second odd-numbered year
18 following the establishment of the corporation, and which one of
19 the initial members will serve a term expiring January 1 of the
20 third odd-numbered year following the establishment of the
21 corporation.

22 (e) Appointments to the board of directors must be made
23 without regard to the race, color, disability, sex, religion, age,
24 or national origin of the appointees.

25 (f) The board of directors shall elect officers of the board
26 in accordance with the corporation 's bylaws.

27 (g) The board of directors shall meet at least three times

1 per year.

2 Sec. 43.054. CHIEF EXECUTIVE OFFICER. (a) The corporation
3 shall employ a chief executive officer to manage and carry out the
4 policies of the corporation. The board of directors shall
5 determine the process for hiring the chief executive officer.

6 (b) The chief executive officer serves at the will of the
7 board of directors.

8 Sec. 43.055. EMPLOYEES. (a) The chief executive officer
9 is responsible for hiring all employees of the corporation.

10 (b) Employees of the corporation serve at the will of the
11 chief executive officer.

12 (c) The chief executive officer or the chief executive
13 officer 's designee shall develop a system of compensation for
14 employees of the corporation as necessary to retain qualified
15 staff.

16 (d) The chief executive officer or the chief executive
17 officer 's designee shall develop a system of annual performance
18 evaluations. Merit pay for corporation employees must be based on
19 the system established under this subsection.

20 (e) The chief executive officer or the chief executive
21 officer 's designee shall prepare and maintain a written policy
22 statement to assure implementation of a program of equal employment
23 opportunity under which all personnel decisions are made without
24 regard to race, color, disability, sex, religion, age, or national
25 origin.

26 (f) The chief executive officer may appoint an internal
27 auditor for the corporation, who may be an employee of the

1 corporation. The appointment of the internal auditor must be
2 approved by the board of directors. The board of directors may
3 require the internal auditor to submit specified reports directly
4 to the board of directors.

5 (g) Except as otherwise provided by this subchapter,
6 employees of the corporation are state employees for all purposes,
7 including:

8 (1) accrual of leave time, insurance benefits, and
9 retirement benefits;

10 (2) Chapter 104, Civil Practice and Remedies Code; and

11 (3) Chapter 501, Labor Code.

12 Sec. 43.056. SOVEREIGN IMMUNITY. (a) The corporation, the
13 board of directors, and the officers and employees of the
14 corporation are entitled to sovereign immunity to the same extent
15 as any other state agency or officer or employee of a state agency.

16 (b) No action taken by the corporation, including the
17 acceptance of benefits under a contract, may be construed to waive
18 the corporation 's sovereign immunity, including immunity from suit
19 or from liability.

20 (c) Subchapter C, Chapter 2260, Government Code, does not
21 apply to the corporation.

22 Sec. 43.057. LIABILITY INSURANCE FOR BOARD MEMBERS AND
23 EMPLOYEES. (a) The corporation may purchase or otherwise acquire
24 insurance to protect members of the board of directors and
25 employees of the corporation, subject to Subsection (c).

26 (b) Insurance purchased or acquired by the corporation
27 under this section may:

1 (1) protect against any type of liability to third
2 persons that might be incurred while conducting corporation
3 business; and

4 (2) provide for all costs of defending a cause of
5 action for such liability, including court costs and attorney 's
6 fees.

7 (c) This section does not authorize the purchase or
8 acquisition of insurance to protect against liability not described
9 in Subsection (b).

10 Sec. 43.058. ETHICS POLICY; CONFLICTS OF INTEREST.

11 (a) The board of directors shall adopt an ethics policy that
12 provides standards of conduct relating to the management and
13 investment of the permanent school fund in accordance with Section
14 43.0031 (a). The ethics policy must include provisions applicable
15 to:

16 (1) members of the board of directors;
17 (2) employees of the corporation; and
18 (3) any person who provides services to the
19 corporation relating to the management or investment of the
20 permanent school fund.

21 (b) A member of the board of directors, an employee of the
22 corporation, and a person who provides services to the corporation
23 relating to the management or investment of the permanent school
24 fund shall disclose in writing to the corporation any business,
25 commercial, or other relationship that could reasonably be expected
26 to diminish the person 's independence of judgment in the
27 performance of the person 's responsibilities relating to the

1 management or investment of the permanent school fund.

2 (c) The board of directors shall define in the ethics policy
3 adopted under Subsection (a) the types of relationships that may
4 create a possible conflict of interest.

5 (d) A person who makes a written disclosure under Subsection
6 (b) stating a possible conflict of interest may not give advice or
7 make decisions about a matter affected by the possible conflict of
8 interest unless the board of directors expressly waives this
9 prohibition. The board of directors may delegate the authority to
10 waive the prohibition established by this subsection.

11 Sec. 43.059. APPLICABILITY OF CERTAIN LAWS. (a) Except as
12 otherwise provided by and to the extent consistent with this
13 subchapter, Title 1, Business Organizations Code, and Chapter 22,
14 Business Organizations Code, apply to the corporation.

15 (b) Subject to Section 43.060, the corporation is a
16 governmental body for purposes of Chapter 551, Government Code.

17 (c) The corporation is exempt from:

18 (1) Chapters 654 and 660, Government Code, and
19 Subchapter K, Chapter 659, Government Code, to the extent the board
20 of directors determines that an exemption from those provisions is
21 necessary for the corporation to perform the board's fiduciary
22 duties under this subchapter;

23 (2) all state laws regulating or limiting purchasing
24 by state agencies, including Subtitle D, Title 10, Government Code,
25 and Chapters 2254, 2261, and 2262, Government Code;

26 (3) the franchise tax under Chapter 171, Tax Code; and

27 (4) any filing costs or other fees imposed by the state

1 on a corporation.

2 Sec. 43.060. EXCEPTION TO OPEN MEETING REQUIREMENTS FOR
3 CERTAIN CONSULTATIONS CONCERNING INVESTMENTS. (a) In this
4 section, "private investment fund," "reinvestment," and
5 "restricted securities" have the meanings assigned by Section
6 552.143 , Government Code.

7 (b) The board of directors may conduct a closed meeting in
8 accordance with Subchapter E, Chapter 551 , Government Code, to
9 deliberate or confer with one or more employees, consultants, or
10 legal counsel of the corporation or with a third party if the only
11 purpose of the meeting is to receive information from or question
12 the employees, consultants, or legal counsel or third party
13 relating to:

14 (1) investment transactions or potential investment
15 transactions if, before conducting the closed meeting, a majority
16 of the board of directors in an open meeting vote that deliberating
17 or conferring in an open meeting would have a detrimental effect on
18 the corporation 's position in negotiations with third parties or
19 put the corporation at a competitive disadvantage in the market;

20 (2) the purchase, holding, or disposal of restricted
21 securities or a private investment fund 's investment in restricted
22 securities if, under Section 552.143 , Government Code, the
23 information discussed would be confidential and excepted from the
24 requirements of Section 552.021 , Government Code, if the
25 information were included in the records of a governmental body; or

26 (3) a procurement proposed to be awarded by the board
27 of directors if, before conducting the closed meeting, a majority

1 of the board of directors in an open meeting vote that deliberating
2 or conferring in an open meeting would have a detrimental effect on
3 the corporation 's position in negotiations with third parties.

4 (c) Any vote or final action taken on a procurement
5 described by Subsection (b)(3) must be conducted in an open
6 meeting.

7 Sec. 43.061. RECORD RETENTION. (a) Subchapter L, Chapter
8 441, Government Code, does not apply to the corporation.

9 (b) The corporation may establish record retention policies
10 for the corporation. In establishing the policies under this
11 section, the corporation may consider relevant rules and guidelines
12 adopted by the Texas State Library and Archives Commission.

13 Sec. 43.062. INFORMATION TECHNOLOGY AND ASSOCIATED
14 RESOURCES. (a) Chapters 2054 and 2055, Government Code, do not
15 apply to the corporation or to any state agency with respect to a
16 contract entered into between the agency and the corporation for
17 information technology or associated resources.

18 (b) The corporation shall control all aspects of, and may
19 contract with third parties for, the corporation 's information
20 technology and associated resources, including:

21 (1) computer, data management, and telecommunications
22 operations;

23 (2) procurement of hardware, software, and middleware
24 and telecommunications equipment and systems;

25 (3) location, operation, and replacement of
26 computers, computer systems, software provided as a service, and
27 telecommunications systems;

- (4) data processing;
- (5) security;
- (6) disaster recovery; and
- (7) storage.

(c) The Department of Information Resources shall assist the corporation at the request of the corporation and must consider the corporation a customer of the department. Notwithstanding any other law, the corporation may:

- (1) purchase any item through the department; and
- (2) contract with the department for and use any service available through the department.

Sec. 43.063. GENERAL POWERS AND DUTIES OF CORPORATION. (a)

The corporation may amend the articles of incorporation adopted by the State Board of Education when the corporation was established, subject to board approval.

(b) The corporation may adopt and amend:

- (1) subject to State Board of Education approval, bylaws for the corporation;
- (2) resolutions and policies of the corporation; and
- (3) any other document necessary to carry out the corporation 's purpose.

(c) The corporation may engage in any activity necessary to manage the investments of the permanent school fund, including entering into any contract in connection with the investment of the permanent school fund, to the extent the activity complies with applicable fiduciary duties.

(d) The corporation shall make all purchases of goods and

1 services in accordance with applicable fiduciary duties and may use
2 purchasing methods that ensure the best value to the corporation.
3 In determining best value, the corporation may consider the best
4 value standards applicable to state agencies under Section
5 2155.074 , Government Code.

6 (e) The corporation may:

7 (1) delegate investment authority for the investment
8 of the permanent school fund to one or more private professional
9 investment managers; or

10 (2) contract with one or more private professional
11 investment managers to assist the corporation in making investments
12 of the permanent school fund.

13 (f) The corporation may receive, transfer, and disburse
14 money and securities of the fund as provided by statute or the Texas
15 Constitution, except that the corporation may not distribute money
16 from the permanent school fund to the available school fund except
17 as authorized under Section 43.066.

18 (g) The corporation may enter into a contract with a state
19 agency, a governmental body, or another entity to manage or invest
20 funds on behalf of the agency, body, or entity.

21 Sec. 43.064. CONTRACTING FOR FACILITIES AND NECESSARY
22 SUPPORT. The corporation may contract with a state agency or
23 another entity to provide operational support, facilities,
24 information and data technology, staff, or other support for the
25 corporation. The corporation may but is not required to request
26 allocation of space to the corporation under Subchapter C, Chapter
27 2165 , Government Code.

1 Sec. 43.065. WRITTEN INVESTMENT OBJECTIVES; PERFORMANCE
2 EVALUATION. In accordance with Section 43.004 , the board of
3 directors shall:

- 4 (1) develop written investment objectives concerning
5 the investment of the permanent school fund; and
6 (2) employ a well-recognized performance measurement
7 service to evaluate and analyze the investment results of the
8 permanent school fund.

9 Sec. 43.066. DISTRIBUTIONS BY CORPORATION FROM PERMANENT
10 SCHOOL FUND TO AVAILABLE SCHOOL FUND. (a) The corporation may
11 distribute from the permanent school fund to the available school
12 fund under Section 5(g), Article VII, Texas Constitution, an amount
13 not to exceed the limitation under that section that is determined
14 in accordance with rules established by the corporation.

15 (b) In developing the rules for distributions under
16 Subsection (a), the corporation shall develop and establish an
17 annual minimum distribution rate that the corporation will use in
18 making a distribution from the permanent school fund to the
19 available school fund each state fiscal year. In developing the
20 annual minimum distribution rate under this subsection, the
21 corporation may consider:

22 (1) transfers made from the permanent school fund to
23 the available school fund under Section 43.002 in accordance with
24 Section 5(a), Article VII, Texas Constitution;

25 (2) factors that relate to the current and future
26 public school students in the state; and

27 (3) any other factors the corporation determines

1 relevant.

2 Sec. 43.067. BOND GUARANTEE PROGRAM. The corporation, the
3 State Board of Education, and the agency shall coordinate to
4 determine the corporation 's role in the operation and management of
5 the permanent school fund in connection with the bond guarantee
6 program under Subchapter C, Chapter 45, to ensure the proper and
7 efficient operation of the program, including the handling of any
8 associated reimbursements, transfers, and disbursements.

9 Sec. 43.068. ANNUAL AUDIT. (a) Not less than once each
10 year, the board of directors shall submit to the Legislative Budget
11 Board an audit report regarding the operations of the corporation.

12 (b) The corporation may contract with a certified public
13 accountant or the state auditor to conduct an independent audit of
14 the operations of the corporation.

15 (c) This section does not affect the state auditor 's
16 authority to conduct an audit of the corporation in accordance with
17 Chapter 321, Government Code.

18 Sec. 43.069. ANNUAL INVESTMENT REPORT. The corporation
19 shall annually submit to the State Board of Education and the
20 General Land Office a report on the allocation of assets and
21 investment performance of the portion of the permanent school fund
22 for which the corporation is responsible.

23 Sec. 43.070. REPORT ON ANTICIPATED TRANSFER TO AVAILABLE
24 SCHOOL FUND. Not later than November 1 of each even-numbered year,
25 the corporation shall submit to the legislature, comptroller, State
26 Board of Education, and Legislative Budget Board a report that in
27 detail specifically states the date a transfer will be made and the

1 amount the corporation will transfer during the subsequent state
2 fiscal biennium from the permanent school fund to the available
3 school fund under Section 43.066.

4 Sec. 43.071. GIFTS, GRANTS, AND DONATIONS. The corporation
5 may accept, and establish a nonprofit corporation or other entity
6 for the purpose of accepting, a gift, grant, donation, or bequest of
7 money, securities, property, or any other assets from any public or
8 private source for the permanent school fund.

9 SECTION 1.07. Section 2157.068 (j), Government Code, is
10 amended to read as follows:

11 (j) The following entities may purchase commodity items
12 through the department, and be charged a reasonable administrative
13 fee, as provided by this section:

- 14 (1) the Electric Reliability Council of Texas;
- 15 (2) the Lower Colorado River Authority;
- 16 (3) a private school, as defined by Section 5.001 ,
17 Education Code;
- 18 (4) a private or independent institution of higher
19 education, as defined by Section 61.003 , Education Code;
- 20 (5) a volunteer fire department, as defined by Section
21 152.001 , Tax Code;
- 22 (6) subject to Section 418.193 , a public safety
23 entity, as defined by 47 U.S.C. Section 1401; ~~or~~
- 24 (7) subject to Section 418.193 , a county hospital,
25 public hospital, or hospital district; or
- 26 (8) the Texas Permanent School Fund Corporation, if
27 incorporated under Section 43.052, Education Code.

1 SECTION 1.08. Sections 43.006 (b), (c), (d), (e), (f), (g),
2 (h), (i), (j), and (k), Education Code, are repealed.

3 ARTICLE 2. SCHOOL LAND BOARD 'S MANAGEMENT OF PERMANENT SCHOOL FUND

4 SECTION 2.01. Section 51.001 , Natural Resources Code, is
5 amended by adding Subdivisions (13) and (14) to read as follows:

6 (13) "Real property holding" means any direct or
7 indirect interest in real property located in the state or any
8 interest in a joint venture whose primary purpose is the
9 acquisition, development, holding, and disposing of real property
10 located in the state. The term does not include an interest in an
11 investment vehicle.

12 (14) "Investment vehicle" means:

13 (A) a multi-investment separately managed
14 account or similar investment fund;

15 (B) a multi-asset closed-end or open-end
16 investment fund sponsored and managed by a third party;

17 (C) a real estate investment trust;

18 (D) an investment managed by a third party
19 alongside a multi-asset closed-end or open-end investment fund that
20 is also managed by the third party or by any of the third party 's
21 related persons or affiliates; or

22 (E) a corporation, partnership, limited
23 liability company, or other entity whose primary purpose is to:

24 (i) sponsor and manage investments on
25 behalf of third parties, including institutional investors; or

26 (ii) operate assets or provide brokerage or
27 other services to third parties under circumstances in which the

1 entity does not directly or indirectly own the underlying assets.

2 SECTION 2.02. Section 51.011 , Natural Resources Code, is
3 amended by amending Subsections (a) and (a-1) and adding Subsection
4 (a-3) to read as follows:

5 (a) Any land, mineral or royalty interest, or real property
6 holding, and [~~estate investment, or other interest, including~~]
7 revenue received from any land or real property holding [~~those~~
8 ~~sources~~], that is set apart to the permanent school fund under the
9 constitution and laws of this state together with the mineral
10 estate in riverbeds, channels, and the tidelands, including
11 islands, shall be subject to the sole and exclusive management and
12 control of the School Land Board [~~school land board~~] and the
13 commissioner under the provisions of this chapter and other
14 applicable law.

15 (a-1) The board may acquire, sell, lease, trade, improve,
16 maintain, protect, or otherwise manage, control, or use land,
17 mineral and royalty interests, or real property holdings, and
18 [~~estate investments, or other interests, including~~] revenue
19 received from land or real property holdings [~~those sources~~], that
20 are set apart to the permanent school fund in any manner, at such
21 prices, and under such terms and conditions as the board finds to be
22 in the best interest of the fund.

23 (a-3) All revenue received from mineral or royalty
24 interests described by Subsection (a), including bonus payments,
25 mineral lease rental revenues, royalties, and any other type of
26 revenue received from those interests, less any amount specified by
27 appropriation to be retained by the board under this subsection,

1 shall be transferred each month to the Texas Permanent School Fund
2 Corporation for investment in the permanent school fund.

3 SECTION 2.03. Section 51.017 , Natural Resources Code, is
4 amended to read as follows:

5 Sec. 51.017. FURNISHING DATA TO TEXAS PERMANENT SCHOOL FUND
6 CORPORATION [~~BOARD OF EDUCATION~~]. On request, the commissioner
7 shall furnish to the Texas Permanent School Fund Corporation [~~State~~
8 ~~Board of Education~~] all available data.

9 SECTION 2.04. Section 51.401 (a), Natural Resources Code, is
10 amended to read as follows:

11 (a) The board may designate funds or revenue received from
12 any land or real property holdings, and any proceeds received from
13 the sale of any mineral or royalty interest, [~~real estate~~
14 ~~investment, or other interest, including revenue received from~~
15 ~~those sources,~~] that is set apart to the permanent school fund under
16 the constitution and laws of this state together with the mineral
17 estate in riverbeds, channels, and the tidelands, including
18 islands, for deposit in the real estate special fund account of the
19 permanent school fund in the State Treasury to be used by the board
20 as provided by this subchapter.

21 SECTION 2.05. Section 51.402 (a), Natural Resources Code, is
22 amended to read as follows:

23 (a) The [~~Except as provided by Subsection (c), the~~] board
24 may use funds designated under Section 51.401 for any of the
25 following purposes:

26 (1) to add to a tract of public school land to form a
27 tract of sufficient size to be manageable;

- 1 (2) to add contiguous land to public school land;
- 2 (3) to acquire, as public school land, interests in
3 real property for biological, residential, commercial, geological,
4 cultural, or recreational purposes;
- 5 (4) to acquire mineral and royalty interests for the
6 use and benefit of the permanent school fund;
- 7 (5) to protect, maintain, or enhance the value of
8 public school land and mineral or royalty interests on that land;
- 9 (6) to acquire real property holdings [~~interests in~~
10 ~~real estate~~];
- 11 (7) to pay reasonable fees for professional services
12 related to a permanent school fund investment; or
- 13 (8) to acquire, sell, lease, trade, improve, maintain,
14 protect, or use land, mineral and royalty interests, or real
15 property holdings [~~estate investments, an investment or interest in~~
16 ~~public infrastructure, or other interests~~], at such prices and
17 under such terms and conditions the board determines to be in the
18 best interest of the permanent school fund.

19 SECTION 2.06. Section 51.4021 , Natural Resources Code, is
20 amended to read as follows:

21 Sec. 51.4021. APPOINTMENT OF [~~SPECIAL FUND MANAGERS,~~
22 INVESTMENT CONSULTANTS[,] - OR ADVISORS. (a) The board may appoint
23 investment [~~managers,~~] consultants[,] - or advisors to [~~invest or~~
24 assist the board in using [~~investing~~] funds designated under
25 Section 51.401 in a manner authorized under Section 51.402 by
26 contracting for professional [~~investment management or~~] investment
27 advisory services with one or more organizations that are in the

1 business of ~~[managing—or]~~ advising on the management of real estate
2 investments.

3 (b) To be eligible for appointment under this section, an
4 investment ~~[manager,]~~ consultant[,] — or advisor shall agree to abide
5 by the policies, requirements, or restrictions, including ethical
6 standards and disclosure policies and criteria for determining the
7 quality of investments and for the use of standard rating services,
8 that the board adopts for real estate investments of the permanent
9 school fund. Funds designated under Section 51.401 may not be
10 invested in a real estate investment trust, as defined by Section
11 200.001 , Business Organizations Code.

12 (c) Compensation paid to an investment ~~[manager,]~~
13 consultant[,] — or advisor by the board must be consistent with the
14 compensation standards of the investment industry and compensation
15 paid by similarly situated institutional investors.

16 (d) Chapter 2263 , Government Code, applies to investment
17 ~~[managers,]~~ consultants and[, —~~or~~] advisors appointed under this
18 section. The board by rule shall adopt standards of conduct for
19 investment ~~[managers,]~~ consultants and[, —~~or~~] advisors appointed
20 under this section as required by Section 2263.004 , Government
21 Code, and shall implement the disclosure requirements of Section
22 2263.005 of that code.

23 SECTION 2.07. The heading to Section 51.412 , Natural
24 Resources Code, is amended to read as follows:

25 Sec. 51.412. REPORT ON USE OF CERTAIN MONEY ~~[REPORTS TO~~
26 ~~LEGISLATURE].~~

27 SECTION 2.08. Sections 51.412 (a) and (c), Natural Resources

1 Code, are amended to read as follows:

2 (a) Not later than September 1 of each even-numbered year,
3 the board shall submit to the legislature, the Texas Permanent
4 School Fund Corporation, and the Legislative Budget Board a report
5 that, specifically and in detail, assesses the direct and indirect
6 economic impact, as anticipated by the board, of the use
7 ~~[investment]~~ of funds: _

8 (1) retained by the board as provided by Section
9 51.011 (a-3); or

10 (2) designated under Section 51.401 for deposit in the
11 real estate special fund account of the permanent school fund.

12 (c) The report must include the following information:

13 (1) the total amount of the funds designated by
14 Section 51.401 for deposit in the real estate special fund account
15 of the permanent school fund that the board intends to use in a
16 manner authorized under Section 51.402 ~~[invest],~~

17 (2) the amount of funds retained by ~~[rate of return]~~
18 the board as provided by Section 51.011 (a-3) and the purposes for
19 which the board intends to use those funds ~~[expects to attain on the~~
20 ~~investment],~~

21 (3) the amount of the funds the board expects to
22 distribute to the available school fund or the Texas Permanent
23 School Fund Corporation ~~[State Board of Education]~~ for investment
24 in the permanent school fund under Section 51.413 ~~[after making the~~
25 ~~investments],~~

26 (4) ~~[the distribution of the board's investments by~~
27 ~~county,~~

1 ~~[(5) the effect of the board's investments on the level~~
2 ~~of employment, personal income, and capital investment in the~~
3 ~~state;~~

4 ~~[(6)]~~ the amounts of all fees or other compensation
5 paid by the board to investment ~~[managers,]~~ consultants and~~[, or]~~
6 advisors appointed or organizations contracted with under Section
7 51.4021 ; and

8 (5) ~~[(7)]~~ any other information the board considers
9 necessary to include in the report.

10 SECTION 2.09. Section 51.413 , Natural Resources Code, is
11 amended to read as follows:

12 Sec. 51.413. TRANSFERS FROM THE REAL ESTATE SPECIAL FUND
13 ACCOUNT TO THE AVAILABLE SCHOOL FUND AND THE PERMANENT SCHOOL FUND.

14 (a) The board may, by a resolution adopted at a regular meeting,
15 release from the real estate special fund account funds previously
16 designated under Section 51.401 or managed, used, or encumbered
17 under Section 51.402 or Section 51.4021 to be deposited in the State
18 Treasury to the credit of:

19 (1) the available school fund; or

20 (2) the Texas Permanent School Fund Corporation ~~[State~~
21 ~~Board of Education]~~ for investment in the permanent school fund.

22 (b) The board shall adopt rules to establish the procedure
23 that will be used by the board to determine the date a transfer will
24 be made and the amount of the funds that will be transferred to the
25 available school fund or to the Texas Permanent School Fund
26 Corporation ~~[State Board of Education]~~ for investment in the
27 permanent school fund from the real estate special fund account as

1 provided by Subsection (a).

2 SECTION 2.10. The following provisions are repealed:

3 (1) Section 43.0052 , Education Code;

4 (2) Sections 32.0161 and 32.068 , Natural Resources
5 Code;

6 (3) Section 51.402 (c), Natural Resources Code, as
7 amended by Chapters 493 (H.B. 4388) and 524 (S.B. 608), Acts of the
8 86th Legislature, Regular Session, 2019; and

9 (4) Sections 51.4131 and 51.414 , Natural Resources
10 Code.

11 SECTION 2.11. (a) Subject to Subsection (b) of this
12 section, as soon as practicable after the effective date of this
13 article and on the date agreed to by the State Board of Education,
14 the Texas Education Agency, the School Land Board, and the Texas
15 Permanent School Fund Corporation, as applicable:

16 (1) all powers, duties, functions, programs, and
17 activities of the State Board of Education and the Texas Education
18 Agency relating to the management and investment of the permanent
19 school fund transfer to the Texas Permanent School Fund Corporation
20 by operation of law; and

21 (2) all powers, duties, functions, programs, and
22 activities of the School Land Board relating to assets or
23 investments of the permanent school fund described by Section
24 2.15(a)(1) of this article transfer to the Texas Permanent School
25 Fund Corporation by operation of law.

26 (b) The Texas Permanent School Fund Corporation may delay
27 the transfer of any power, duty, function, program, or activity

1 under Subsection (a) of this section if the corporation determines
2 that the transfer would have an adverse impact on or is not in the
3 best interest of the permanent school fund.

4 (c) All rules, policies, and procedures relating to the
5 management and investment of the permanent school fund adopted by
6 the State Board of Education or the School Land Board before the
7 transfer under this section remain in effect until the Texas
8 Permanent School Fund Corporation adopts substitute rules,
9 policies, or procedures. In the event of a conflict between rules,
10 policies, or procedures adopted by the State Board of Education and
11 rules, policies, or procedures adopted by the School Land Board,
12 the corporation shall determine which rules, policies, or
13 procedures control.

14 SECTION 2.12. On the date the transfers under Section
15 2.11(a) of this article occur:

16 (1) an employee of the permanent school fund division
17 of the Texas Education Agency or the investment management division
18 of the General Land Office becomes an employee of the Texas
19 Permanent School Fund Corporation; and

20 (2) any employee compensation plan, program,
21 agreement, or arrangement, including any incentive compensation
22 plan and outstanding balance or award, relating to each employee
23 described by Subdivision (1) of this section transfers from the
24 Texas Education Agency or the General Land Office, as applicable,
25 to the Texas Permanent School Fund Corporation.

26 SECTION 2.13. (a) As soon as practicable after the
27 effective date of this article but not later than the date the

1 transfers under Section 2.11(a) of this article occur, the State
2 Board of Education shall enter into a memorandum of understanding
3 with any state agency the board determines necessary to provide for
4 the transfer to or continued use by the Texas Permanent School Fund
5 Corporation for a period determined by the board of any property,
6 facilities, information and data technology, services, and support
7 staff of the state agency used in connection with operations
8 relating to the management or investment of the permanent school
9 fund.

10 (b) On the date the transfers under Section 2.11(a) of this
11 article occur, the unexpended and unobligated balance of any money
12 appropriated to a state agency relating to the powers, duties,
13 programs, functions, and activities that are transferred to the
14 Texas Permanent School Fund Corporation is transferred to that
15 corporation.

16 SECTION 2.14. (a) Not later than March 30, 2023, the State
17 Board of Education and the Texas Education Agency shall provide to
18 the Texas Permanent School Fund Corporation all financial,
19 contract, and investment records and documents maintained by the
20 board, the agency, or a service provider of the board or agency
21 relating to the management or investment of the permanent school
22 fund.

23 (b) Except as provided by Subsection (c) or (d) of this
24 section, as soon as practicable after the effective date of this
25 article and not later than the date the transfers under Section
26 2.11(a) of this article occur, all assets and investments of the
27 permanent school fund held by the State Board of Education or the

1 Texas Education Agency and any related contracts are transferred to
2 the Texas Permanent School Fund Corporation by operation of law in
3 accordance with applicable law and any governing documentation
4 applicable to those assets, investments, or contracts, including
5 any applicable limited partnership agreement, limited liability
6 company agreement, subscription agreement, letter agreement, or
7 side letter.

8 (c) The State Board of Education and the Texas Education
9 Agency shall retain any assets or investments that would otherwise
10 be transferred to the Texas Permanent School Fund Corporation under
11 Subsection (b) of this section if the corporation determines that:

12 (1) the asset or investment cannot be transferred to
13 the corporation, either because the corporation cannot properly
14 hold custody of the asset or investment or for some other reason; or

15 (2) the transfer of the asset or investment:

16 (A) would have an adverse effect on the permanent
17 school fund or on any asset or investment set apart to the permanent
18 school fund; or

19 (B) is not in the best interest of the permanent
20 school fund.

21 (d) If an asset or investment required to be transferred to
22 the Texas Permanent School Fund Corporation under Subsection (b) of
23 this section cannot be transferred to the corporation in a timely
24 manner, the State Board of Education, the Texas Education Agency,
25 and the corporation shall coordinate concerning the appropriate
26 timing of the transfer or other disposition of the asset or
27 investment.

1 (e) The State Board of Education and the Texas Permanent
2 School Fund Corporation shall coordinate the ongoing management or
3 other disposition of any assets or investments retained by the
4 board or the Texas Education Agency under Subsection (c) or (d) of
5 this section, including:

6 (1) providing direction to the Texas Education Agency
7 regarding the asset or investment;

8 (2) the funding of any outstanding commitments related
9 to the asset or investment;

10 (3) the handling of any distributions, income, or
11 revenues from the asset or investment; and

12 (4) the making of any decisions required with respect
13 to the asset or investment.

14 SECTION 2.15. (a) Not later than January 31, 2023, the
15 School Land Board shall provide to:

16 (1) the Texas Permanent School Fund Corporation a list
17 of each asset and investment acquired on or after September 1, 2001,
18 and held by the board on January 31, 2023, other than sovereign or
19 other state lands, mineral or royalty interests, or real property
20 holdings, as that term is defined by Section 51.001, Natural
21 Resources Code, as amended by this article, and information on
22 unfunded commitments and funding obligations related to the asset
23 or investment; and

24 (2) the general partner or other managing entity of
25 each asset or investment identified under Subdivision (1) of this
26 subsection notice of the transfer of the asset or investment to the
27 Texas Permanent School Fund Corporation under this section.

1 (b) Not later than March 30, 2023, the School Land Board
2 shall provide to the Texas Permanent School Fund Corporation all
3 financial, contract, and investment records and documents
4 maintained by the board, the General Land Office, or a service
5 provider of the board or office relating to the operations
6 associated with or the management of an asset or investment
7 identified under Subsection (a)(1) of this section.

8 (c) Except as provided by Subsection (d) or (e) of this
9 section, not later than December 31, 2023, all assets and
10 investments identified under Subsection (a)(1) of this section and
11 any related contracts are transferred from the School Land Board to
12 the Texas Permanent School Fund Corporation by operation of law in
13 accordance with applicable law and any governing documentation
14 applicable to those assets, investments, or contracts, such as any
15 applicable limited partnership agreement, limited liability
16 company agreement, subscription agreement, letter agreement, or
17 side letter.

18 (d) The School Land Board shall retain any assets or
19 investments that would otherwise be transferred to the Texas
20 Permanent School Fund Corporation under Subsection (c) of this
21 section if the corporation determines that:

22 (1) the asset or investment cannot be transferred to
23 the corporation, either because the corporation cannot properly
24 hold custody of the asset or investment or for some other reason; or

25 (2) the transfer of the asset or investment:

26 (A) would have an adverse effect on the permanent
27 school fund or on any asset or investment set apart to the permanent

1 school fund; or

2 (B) is not in the best interest of the permanent
3 school fund.

4 (e) If an asset or investment required to be transferred to
5 the Texas Permanent School Fund Corporation under Subsection (c) of
6 this section cannot be transferred to the corporation by December
7 31, 2023, the School Land Board and the corporation shall
8 coordinate concerning the appropriate timing of the transfer or
9 other disposition of the asset or investment.

10 (f) The School Land Board and the Texas Permanent School
11 Fund Corporation shall coordinate the ongoing management or other
12 disposition of any assets or investments retained by the board
13 under Subsection (d) or (e) of this section, including:

14 (1) the funding of any outstanding commitments related
15 to the asset or investment;

16 (2) the handling of any distributions, income, or
17 revenues from the asset or investment; and

18 (3) the making of any decisions required with respect
19 to the asset or investment.

20 (g) Not later than December 31, 2023, all cash holdings
21 related to or derived from permanent school fund assets held by the
22 School Land Board shall be transferred to the Texas Permanent
23 School Fund Corporation for deposit to the credit of the permanent
24 school fund.

25 (h) On the date on which the Texas Permanent School Fund
26 Corporation determines that all outstanding commitments required
27 to be paid from the permanent school fund liquid account have been

1 fully resolved, the account is abolished and the balance of that
2 account is transferred to the permanent school fund.

3 SECTION 2.16. This article takes effect December 31, 2022,
4 but only if the State Board of Education incorporates the Texas
5 Permanent School Fund Corporation under Subchapter B, Chapter 43,
6 Education Code, as added by this Act, on or before that date. If the
7 State Board of Education does not incorporate the Texas Permanent
8 School Fund Corporation on or before December 31, 2022, this
9 article has no effect.

10 ARTICLE 3. EFFECTIVE DATE

11 SECTION 3.01. Except as otherwise provided by this Act,
12 this Act takes effect September 1, 2021.

President of the Senate

Speaker of the House

I hereby certify that S.B. No. 1232 passed the Senate on May 6, 2021, by the following vote: Yeas 30, Nays 0; and that the Senate concurred in House amendments on May 29, 2021, by the following vote: Yeas 31, Nays 0.

Secretary of the Senate

I hereby certify that S.B. No. 1232 passed the House, with amendments, on May 26, 2021, by the following vote: Yeas 140, Nays 5, one present not voting.

Chief Clerk of the House

Approved:

Date

Governor

TEXAS EDUCATION CODE
CHAPTER 7. STATE ORGANIZATION
SUBCHAPTER D. STATE BOARD OF EDUCATION

TEC, §7.102. STATE BOARD OF EDUCATION POWERS AND DUTIES.

- (a) The board may perform only those duties relating to school districts or regional education service centers assigned to the board by the constitution of this state or by this subchapter or another provision of this code.
- (b) The board has the powers and duties provided by Subsection (c), which shall be carried out with the advice and assistance of the commissioner.
- (c)
 - (1) The board shall develop and update a long-range plan for public education.
 - (2) The board may enter into contracts relating to or accept grants for the improvement of educational programs specifically authorized by statute.
 - (3) The board may accept a gift, donation, or other contribution on behalf of the public school system or agency and, unless otherwise specified by the donor, may use the contribution in the manner the board determines.
 - (4) The board shall establish curriculum and graduation requirements.
 - ~~(5) The board shall establish a standard of performance considered satisfactory on student assessment instruments.~~
 - (6) The board may create special-purpose school districts under Chapter [11](#).
 - (7) The board shall provide for a training course for school district trustees under Section [11.159](#).
 - (8) The board shall adopt a procedure to be used for placing on probation or revoking a home-rule school district charter as required by Subchapter B, Chapter [12](#), and may place on probation or revoke a home-rule school district charter as provided by that subchapter.
 - ~~(9) The board may grant an open enrollment charter or approve a charter revision as provided by Subchapter D, Chapter [12](#).~~
 - (10) The board shall adopt rules establishing criteria for certifying hearing examiners as provided by Section [21.252](#).
 - (11) The board shall adopt rules to carry out the curriculum required or authorized under Section [28.002](#).
 - (12) The board shall establish guidelines for credit by examination under Section [28.023](#).
 - (13) The board shall adopt transcript forms and standards for differentiating high school programs for purposes of reporting academic achievement under Section [28.025](#).
 - (14) The board shall adopt guidelines for determining financial need for purposes of the Texas Advanced Placement Incentive Program under Subchapter C, Chapter [28](#), and may approve payments as provided by that subchapter.
 - (15) The board shall adopt criteria for identifying gifted and talented students and shall develop and update a state plan for the education of gifted and talented students as required under Subchapter D, Chapter [29](#).
 - (16) Repealed by Acts 2013, 83rd Leg., R.S., Ch. 73, Sec. 2.06(a)(1), eff. September 1, 2013.
 - (17) The board shall adopt rules relating to community education development projects as required under Section [29.257](#).
 - (18) The board may approve the plan to be developed and implemented by the commissioner for the coordination of services to children with disabilities as required under Section [30.001](#).
 - (19) The board shall establish a date by which each school district and state institution shall provide to the commissioner the necessary information to determine the district's share of the cost of the education of a student enrolled in the Texas School for the Blind and Visually Impaired or the Texas School for the Deaf as required under Section [30.003](#) and may adopt other rules concerning funding of the education of students enrolled in the Texas School for the Blind and Visually Impaired or the Texas School for the Deaf as authorized under Section [30.003](#).
 - (20) The board shall adopt rules prescribing the form and content of information school districts are required to provide concerning programs offered by state institutions as required under Section [30.004](#).
 - (21) The board shall adopt rules concerning admission of students to the Texas School for the Deaf as required under Section [30.057](#).

- (22) The board shall carry out powers and duties related to regional day school programs for the deaf as provided under Subchapter D, Chapter [30](#).
 - (23) The board shall adopt and purchase or license instructional materials as provided by Chapter [31](#) and adopt rules required by that chapter.
 - (24) The board shall develop and update a long-range plan concerning technology in the public school system as required under Section [32.001](#) and shall adopt rules and policies concerning technology in public schools as provided by Chapter [32](#).
 - (25) The board shall conduct feasibility studies related to the telecommunications capabilities of school districts and regional education service centers as provided by Section [32.033](#).
 - (26) The board shall appoint a board of directors of the center for educational technology under Section [32.034](#).
 - (27) Repealed by Acts 2001, 77th Leg., ch. 1420, Sec. 4.001(b), eff. Sept. 1, 2001.
 - (28) The board shall approve a program for testing students for dyslexia and related disorders as provided by Section [38.003](#).
 - (29) The board shall perform duties in connection with the public school accountability system as prescribed by Chapters [39](#) and [39A](#).
 - (30) The board shall perform duties in connection with the Foundation School Program as prescribed by Chapter [48](#) [42].
 - (31) The board may invest the permanent school fund within the limits of the authority granted by Section [5](#), Article VII, Texas Constitution, and Chapter 43.
 - (32) The board shall adopt rules concerning school district budgets and audits of school district fiscal accounts as required under Subchapter A, Chapter [44](#).
 - (33) The board shall adopt an annual report on the status of the guaranteed bond program and may adopt rules as necessary for the administration of the program as provided under Subchapter C, Chapter [45](#).
 - (34) The board shall prescribe uniform bid blanks for school districts to use in selecting a depository bank as required under Section [45.206](#).
- (d) The board may adopt rules relating to school districts or regional education service centers only as required to carry out the specific duties assigned to the board by the constitution or under Subsection (c).
 - (e) An action of the board to adopt a rule under this section is effective only if the board includes in the rule's preamble a statement of the specific authority under Subsection (c) to adopt the rule.
 - (f) Except as otherwise provided by this subsection, a rule adopted by the board under this section does not take effect until the beginning of the school year that begins at least 90 days after the date on which the rule was adopted. The rule takes effect earlier if the rule's preamble specifies an earlier effective date and the reason for that earlier date and:
 - (1) the earlier effective date is a requirement of:
 - (A) a federal law; or
 - (B) a state law that specifically refers to this section and expressly requires the adoption of an earlier effective date; or
 - (2) on the affirmative vote of two-thirds of the members of the board, the board makes a finding that an earlier effective date is necessary.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE B. STATE AND REGIONAL ORGANIZATION AND GOVERNANCE
CHAPTER 7. STATE ORGANIZATION
SUBCHAPTER D. STATE BOARD OF EDUCATION

TEC, §7.111. HIGH SCHOOL EQUIVALENCY EXAMINATIONS.

- (a) The board shall provide for the administration of high school equivalency examinations.
- (a-1) A person who does not have a high school diploma may take the examination in accordance with rules adopted by the board if the person is:
 - (1) over 17 years of age;
 - (2) 16 years of age or older and:
 - (A) is enrolled in a Job Corps training program under the Workforce Investment Act of 1998 (29 U.S.C. Section 2801 et seq.), and its subsequent amendments;
 - (B) a public agency providing supervision of the person or having custody of the person under a court order recommends that the person take the examination; or
 - (C) is enrolled in the Texas Military Department's Seaborne Challenge Corps; or
 - (3) required to take the examination under a court order issued under Section 65.103(a)(3), Family Code.
- (b) The board by rule shall establish and require payment of a fee as a condition to the issuance of a high school equivalency certificate and a copy of the scores of the examinations. The fee must be reasonable and designed to cover the administrative costs of issuing the certificate and a copy of the scores. The board may not require a waiting period between the date a person withdraws from school and the date the person takes the examination unless the period relates to the time between administrations of the examination.
- (c) The board by rule shall develop and deliver high school equivalency examinations and provide for the administration of the examinations online. The rules must provide a procedure for verifying the identity of the person taking the examination.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE C. LOCAL ORGANIZATION AND GOVERNANCE
CHAPTER 11. SCHOOL DISTRICTS
SUBCHAPTER D. POWERS AND DUTIES OF BOARD OF TRUSTEES OF
INDEPENDENT SCHOOL DISTRICT

TEC, §11.159. MEMBER TRAINING AND ORIENTATION.

- (a) The State Board of Education shall provide a training course for independent school district trustees to be offered by the regional education service centers. Registration for a course must be open to any interested person, including current and prospective board members, and the state board may prescribe a registration fee designed to offset the costs of providing that course.
- (b) A trustee must complete any training required by the State Board of Education. The minutes of the last regular meeting of the board of trustees held before an election of trustees must reflect whether each trustee has met or is deficient in meeting the training required for the trustee as of the first anniversary of the date of the trustee's election or appointment. If the minutes reflect that a trustee is deficient, the district shall post the minutes on the district's Internet website within 10 business days of the meeting and maintain the posting until the trustee meets the requirements.
- (b-1) The State Board of Education shall require a trustee to complete training on school safety. The state board, in coordination with the Texas School Safety Center, shall develop the curriculum and materials for the training.
- (c) The State Board of Education shall require a trustee to complete every two years at least:
 - (1) three hours of training on evaluating student academic performance; and
 - (2) one hour of training on identifying and reporting potential victims of sexual abuse, human trafficking, and other maltreatment of children.
- (c-1) The training required by Subsection (c)(1) must be research-based and designed to support the oversight role of the board of trustees under Section [11.1515](#).
- (c-2) A candidate for trustee may complete the training required by Subsection (c) up to one year before the candidate is elected. A new trustee shall complete the training within 120 days after the date of the trustee's election or appointment. A returning trustee shall complete the training by the second anniversary of the completion of the trustee's previous training.
- (d) A trustee or candidate for trustee may complete training required under Subsection (c) at a regional education service center or through another authorized provider. A provider must certify the completion of the training by a trustee or candidate.

- (e) For purposes of this section, "other maltreatment" has the meaning assigned by Section [42.002](#), Human Resources Code.

Added by Acts 1995, 74th Leg., ch. 260, Sec. 1, eff. May 30, 1995.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 1244 (H.B. [2563](#)), Sec. 5, eff. September 1, 2007.

Acts 2017, 85th Leg., R.S., Ch. 925 (S.B. [1566](#)), Sec. 5, eff. September 1, 2017.

Acts 2019, 86th Leg., R.S., Ch. 214 (H.B. [403](#)), Sec. 1, eff. September 1, 2019.

Acts 2021, 87th Leg., R.S., Ch. 313 (H.B. [690](#)), Sec. 1, eff. September 1, 2021.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE C. LOCAL ORGANIZATION AND GOVERNANCE
CHAPTER 11. SCHOOL DISTRICTS
SUBCHAPTER H. SPECIAL-PURPOSE SCHOOL DISTRICTS

TEC, §11.351. AUTHORITY TO ESTABLISH SPECIAL-PURPOSE SCHOOL DISTRICT.

- (a) On the recommendation of the commissioner and after consulting with the school districts involved and obtaining the approval of a majority of those districts in each affected county in which a proposed school district is located, the State Board of Education may establish a special-purpose school district for the education of students in special situations whose educational needs are not adequately met by regular school districts. The board may impose duties or limitations on the school district as necessary for the special purpose of the district. The board shall exercise the powers as provided by this section relating to the districts established under this section.

- (b) The State Board of Education shall grant to the districts the right to share in the available school fund apportionment and other privileges as are granted to independent and common school districts.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE C. LOCAL ORGANIZATION AND GOVERNANCE
CHAPTER 11. SCHOOL DISTRICTS
SUBCHAPTER H. SPECIAL-PURPOSE SCHOOL DISTRICTS

TEC, §11.352. GOVERNANCE OF SPECIAL-PURPOSE DISTRICT.

- (a) The State Board of Education shall appoint for each district established under Section 11.351 a board of three, five, or seven trustees, as determined by the State Board of Education. A trustee is not required to be a resident of the district.
- (b) For each military reservation school district, the State Board of Education may appoint a board of three or five trustees. Enlisted military personnel and military officers may be appointed to the school board. A majority of the trustees appointed for the district must be civilians and all may be civilians. The trustees shall be selected from a list of persons who are qualified to serve as members of a school district board of trustees under Section 11.061 and who live or are employed on the military reservation. The list shall be furnished to the board by the commanding officer of the military reservation. The trustees appointed serve terms of two years.
- (c) The State Board of Education may adopt rules for the governance of a special-purpose district. In the absence of a rule adopted under this subsection, the laws applicable to independent school districts apply to a special-purpose district.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE C. LOCAL ORGANIZATION AND GOVERNANCE
CHAPTER 12. CHARTERS
SUBCHAPTER D. OPEN-ENROLLMENT CHARTER SCHOOL

TEC, §12.101. AUTHORIZATION.

- (a) In accordance with this subchapter, the commissioner may grant a charter on the application of an eligible entity for an open-enrollment charter school to operate in a facility of a commercial or nonprofit entity, an eligible entity, or a school district, including a home-rule school district. In this subsection, "eligible entity" means:
- (1) an institution of higher education as defined under Section [61.003](#);
 - (2) a private or independent institution of higher education as defined under Section [61.003](#);
 - (3) an organization that is exempt from taxation under Section 501(c)(3), Internal Revenue Code of 1986 (26 U.S.C. Section 501(c)(3)); or
 - (4) a governmental entity.
- (b) After thoroughly investigating and evaluating an applicant, the commissioner, in coordination with a member of the State Board of Education designated for the purpose by the chair of the board, may grant a charter for an open-enrollment charter school only to an applicant that meets any financial, governing, educational, and operational standards adopted by the commissioner under this subchapter, that the commissioner determines is capable of carrying out the responsibilities provided by the charter and likely to operate a school of high quality, and that:
- (1) has not within the preceding 10 years had a charter under this chapter or a similar charter issued under the laws of another state surrendered under a settlement agreement, revoked, denied renewal, or returned; or
 - (2) is not, under rules adopted by the commissioner, considered to be a corporate affiliate of or substantially related to an entity that has within the preceding 10 years had a charter under this chapter or a similar charter issued under the laws of another state surrendered under a settlement agreement, revoked, denied renewal, or returned.
- (b-0) The commissioner shall notify the State Board of Education of each charter the commissioner proposes to grant under this subchapter. Unless, before the 90th day after the date on which the board receives the notice from the commissioner, a majority of the members of the board present and voting vote against the grant of that charter, the commissioner's proposal to grant the charter takes effect. The board may not deliberate or vote on any grant of a charter that is not proposed by the commissioner.
- (b-1) In granting charters for open-enrollment charter schools, the commissioner may not grant a total of more than:

- (1) 215 charters through the fiscal year ending August 31, 2014;
 - (2) 225 charters beginning September 1, 2014;
 - (3) 240 charters beginning September 1, 2015;
 - (4) 255 charters beginning September 1, 2016;
 - (5) 270 charters beginning September 1, 2017; and
 - (6) 285 charters beginning September 1, 2018.
- (b-2) Beginning September 1, 2019, the total number of charters for open-enrollment charter schools that may be granted is 305 charters.
- (b-3) The commissioner may not grant more than one charter for an open-enrollment charter school to any charter holder. The commissioner may consolidate charters for an open-enrollment charter school held by multiple charter holders into a single charter held by a single charter holder with the written consent to the terms of consolidation by or at the request of each charter holder affected by the consolidation.
- (b-4) Notwithstanding Section [12.114](#), approval of the commissioner under that section is not required for establishment of a new open-enrollment charter school campus if the requirements of this subsection are satisfied. A charter holder having an accreditation status of accredited and at least 50 percent of its student population in grades assessed under Subchapter B, Chapter [39](#), or at least 50 percent of the students in the grades assessed having been enrolled in the school for at least three school years may establish one or more new campuses under an existing charter held by the charter holder if:
- (1) the charter holder is currently evaluated under the standard accountability procedures for evaluation under Chapter [39](#) and received a district rating in the highest or second highest performance rating category under Subchapter C, Chapter [39](#), for three of the last five years with at least 75 percent of the campuses rated under the charter also receiving a rating in the highest or second highest performance rating category and with no campus with a rating in the lowest performance rating category in the most recent ratings;
 - (2) the charter holder provides written notice to the commissioner of the establishment of any campus under this subsection in the time, manner, and form provided by rule of the commissioner; and
 - (3) not later than the 60th day after the date the charter holder provides written notice under Subdivision (2), the commissioner does not provide written notice to the charter holder that the commissioner has determined that the charter holder does not satisfy the requirements of this section.
- (b-5) The initial term of a charter granted under this section is five years.

- (b-6) The commissioner shall adopt rules to modify criteria for granting a charter for an open-enrollment charter school under this section to the extent necessary to address changes in performance rating categories or in the financial accountability system under Chapter [39](#).
- (b-7) A charter granted under this section for a dropout recovery school is not considered for purposes of the limit on the number of charters for open-enrollment charter schools imposed by this section. For purposes of this subsection, an open-enrollment charter school is considered to be a dropout recovery school if the school meets the criteria for designation as a dropout recovery school under Section [12.1141\(c\)](#).
- (b-8) In adopting any financial standards under this subchapter that an applicant for a charter for an open-enrollment charter school must meet, the commissioner shall not:
 - (1) exclude any loan or line of credit in determining an applicant's available funding; or
 - (2) exclude an applicant from the grant of a charter solely because the applicant fails to demonstrate having a certain amount of current assets in cash.
- (b-10) The commissioner by rule shall allow a charter holder to provide written notice of the establishment of a new open-enrollment charter school under Subsection (b-4)(2) up to 18 months before the date on which the campus is anticipated to open. Notice provided to the commissioner under this section does not obligate the charter holder to open a new campus.
- (c) If the facility to be used for an open-enrollment charter school is a school district facility, the school must be operated in the facility in accordance with the terms established by the board of trustees or other governing body of the district in an agreement governing the relationship between the school and the district.
- (d) An educator employed by a school district before the effective date of a charter for an open-enrollment charter school operated at a school district facility may not be transferred to or employed by the open-enrollment charter school over the educator's objection.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE D. EDUCATORS AND SCHOOL DISTRICT EMPLOYEES AND VOLUNTEERS
CHAPTER 21. EDUCATORS
SUBCHAPTER B. CERTIFICATION OF EDUCATORS

TEC, §21.041. RULES; FEES.

- (a) The board may adopt rules as necessary for its own procedures.
- (b) The board shall propose rules that:
 - (1) provide for the regulation of educators and the general administration of this subchapter in a manner consistent with this subchapter;
 - (2) specify the classes of educator certificates to be issued, including emergency certificates;
 - (3) specify the period for which each class of educator certificate is valid;
 - (4) specify the requirements for the issuance and renewal of an educator certificate;
 - (5) provide for the issuance of an educator certificate to a person who holds a similar certificate issued by another state or foreign country, subject to Section 21.052;
 - (6) provide for special or restricted certification of educators, including certification of instructors of American Sign Language;
 - (7) provide for disciplinary proceedings, including the suspension or revocation of an educator certificate, as provided by Chapter 2001, Government Code;
 - (8) provide for the adoption, amendment, and enforcement of an educator's code of ethics;
 - (9) provide for continuing education requirements; and
 - (10) provide for certification of persons performing appraisals under Subchapter H.
- (c) The board shall propose a rule adopting a fee for the issuance and maintenance of an educator certificate that, when combined with any fees imposed under Subsection (d), is adequate to cover the cost of administration of this subchapter.
- (d) The board may propose a rule adopting a fee for the approval or renewal of approval of an educator preparation program, or for the addition of a certificate or field of certification to the scope of a program's approval. A fee imposed under this subsection may not exceed the amount necessary, as determined by the board, to provide for the administrative cost of approving, renewing the approval of, and appropriately ensuring the accountability of educator preparation programs under this subchapter.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE D. EDUCATORS AND SCHOOL DISTRICT EMPLOYEES AND VOLUNTEERS
CHAPTER 21. EDUCATORS
SUBCHAPTER B. CERTIFICATION OF EDUCATORS

TEC, §21.043. ACCESS TO PEIMS DATA.

- (a) The agency shall provide the board with access to data obtained under the Public Education Information Management System (PEIMS).
- (b) The agency shall provide educator preparation programs with data based on information reported through the Public Education Information Management System (PEIMS) that enables an educator preparation program to:
 - (1) assess the impact of the program; and
 - (2) revise the program as needed to improve the design and effectiveness of the program.
- (c) The agency in coordination with the board shall solicit input from educator preparation programs to determine the data to be provided to educator preparation programs.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE D. EDUCATORS AND SCHOOL DISTRICT EMPLOYEES AND VOLUNTEERS
CHAPTER 21. EDUCATORS
SUBCHAPTER B. CERTIFICATION OF EDUCATORS

TEC, §21.045. ACCOUNTABILITY SYSTEM FOR EDUCATOR PREPARATION PROGRAMS.

- a) The board shall propose rules necessary to establish standards to govern the continuing accountability of all educator preparation programs based on the following information that is disaggregated with respect to race, sex, and ethnicity:
- (1) results of the certification examinations prescribed under Section [21.048\(a\)](#);
 - (2) performance based on the appraisal system for beginning teachers adopted by the board;
 - (3) achievement, including improvement in achievement, of all students, including students with disabilities, taught by beginning teachers for the first three years following certification, to the extent practicable;
 - (4) compliance with board requirements regarding the frequency, duration, and quality of structural guidance and ongoing support provided by field supervisors to candidates completing student teaching, clinical teaching, or an internship; and
 - (5) results from a teacher satisfaction survey, developed by the board with stakeholder input, of new teachers performed at the end of the teacher's first year of teaching.
- (b) Each educator preparation program shall submit data elements as required by the board for an annual performance report to ensure access and equity. At a minimum, the annual report must contain:
- (1) the performance data from Subsection (a), other than the data required for purposes of Subsection (a)(3);
 - (2) data related to the program's compliance with requirements for field supervision of candidates during their clinical teaching and internship experiences;
 - (3) the following information, disaggregated by race, sex, and ethnicity:
 - (A) the number of candidates who apply;
 - (B) the number of candidates admitted;
 - (C) the number of candidates retained;
 - (D) the number of candidates completing the program;

- (E) the number of candidates employed as beginning teachers under standard teaching certificates by not later than the first anniversary of completing the program;
 - (F) the amount of time required by candidates employed as beginning teachers under probationary teaching certificates to be issued standard teaching certificates;
 - (G) the number of candidates retained in the profession; and
 - (H) any other information required by federal law;
- (4) the ratio of field supervisors to candidates completing student teaching, clinical teaching, or an internship; and
 - (5) any other information necessary to enable the board to assess the effectiveness of the program on the basis of teacher retention and success criteria adopted by the board.
- (c) The board shall propose rules necessary to establish performance standards for the Accountability System for Educator Preparation for accrediting educator preparation programs. At a minimum, performance standards must be based on Subsection (a).
 - (d) To assist an educator preparation program in improving the design and effectiveness of the program in preparing educators for the classroom, the agency shall provide to each program data that is compiled and analyzed by the agency based on information reported through the Public Education Information Management System (PEIMS) relating to the program.

Added by Acts 1995, 74th Leg., ch. 260, Sec. 1, eff. May 30, 1995.

Amended by:

Acts 2009, 81st Leg., R.S., Ch. 723 (S.B. [174](#)), Sec. 2, eff. June 19, 2009.

Acts 2015, 84th Leg., R.S., Ch. 931 (H.B. [2205](#)), Sec. 6, eff. September 1, 2015.

Acts 2017, 85th Leg., R.S., Ch. 757 (S.B. [1839](#)), Sec. 4, eff. June 12, 2017.

Acts 2021, 87th Leg., R.S., Ch. 215 (H.B. [159](#)), Sec. 4, eff. September 1, 2021.

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TITLE 2. PUBLIC EDUCATION
SUBTITLE D. EDUCATORS AND SCHOOL DISTRICT EMPLOYEES AND VOLUNTEERS
CHAPTER 21. EDUCATORS
SUBCHAPTER B. CERTIFICATION OF EDUCATORS

TEC, §21.0441. ADMISSION REQUIREMENTS FOR EDUCATOR PREPARATION PROGRAMS .

- (a) Rules of the board proposed under this subchapter must provide that a person, other than a person seeking career and technology education certification, is not eligible for admission to an educator preparation program, including an alternative educator preparation program, unless the person:
 - (1) except as provided by Subsection (b), satisfies the following minimum grade point average requirements:
 - (A) an overall grade point average of at least 2.50 on a four-point scale or the equivalent on any course work previously attempted at a public or private institution of higher education; or
 - (B) a grade point average of at least 2.50 on a four-point scale or the equivalent for the last 60 semester credit hours attempted at a public or private institution of higher education; and
 - (2) if the person is seeking initial certification:
 - (A) has successfully completed at least:
 - (i) 15 semester credit hours in the subject-specific content area in which the person is seeking certification, if the person is seeking certification to teach mathematics or science at or above grade level seven; or
 - (ii) 12 semester credit hours in the subject-specific content area in which the person is seeking certification, if the person is not seeking certification to teach mathematics or science at or above grade level seven; or
 - (B) has achieved a satisfactory level of performance on a content certification examination, which may be a content certification examination administered by a vendor approved by the commissioner for purposes of administering such an examination for the year for which the person is applying for admission to the program.
- (b) The board's rules must permit an educator preparation program to admit in extraordinary circumstances a person who fails to satisfy a grade point average requirement prescribed by Subsection (a)(1)(A) or (B), provided that:

- (1) not more than 10 percent of the total number of persons admitted to the program in a year fail to satisfy the requirement under Subsection (a)(1)(A) or (B);
 - (2) each person admitted as described by this subsection performs, before admission, at a satisfactory level on an appropriate subject matter examination for each subject in which the person seeks certification; and
 - (3) for each person admitted as described by this subsection, the director of the program determines and certifies, based on documentation provided by the person, that the person's work, business, or career experience demonstrates achievement comparable to the academic achievement represented by the grade point average requirement.
- (c) The overall grade point average of each incoming class admitted by an educator preparation program, including an alternative educator preparation program, may not be less than 3.00 on a four-point scale or the equivalent or a higher overall grade point average prescribed by the board. In computing the overall grade point average of an incoming class for purposes of this subsection, a program may:
- (1) include the grade point average of each person in the incoming class based on all course work previously attempted by the person at a public or private institution of higher education; or
 - (2) include the grade point average of each person in the incoming class based only on the last 60 semester credit hours attempted by the person at a public or private institution of higher education.
- (d) A person seeking career and technology education certification is not included in determining the overall grade point average of an incoming class under Subsection (c).

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TEC, §21.0443. EDUCATOR PREPARATION PROGRAM APPROVAL AND RENEWAL.

- (a) The board shall propose rules to establish standards to govern the approval or renewal of approval of:
 - (1) educator preparation programs; and
 - (2) certification fields authorized to be offered by an educator preparation program.
- (b) To be eligible for approval or renewal of approval, an educator preparation program must:
 - (1) incorporate proactive instructional planning techniques throughout course work and across content areas using a framework that:
 - (A) provides flexibility in the ways:
 - (i) information is presented;
 - (ii) students respond or demonstrate knowledge and skills; and
 - (iii) students are engaged;
 - (B) reduces barriers in instruction;
 - (C) provides appropriate accommodations, supports, and challenges; and
 - (D) maintains high achievement expectations for all students, including students with disabilities and students of limited English proficiency;
 - (2) integrate inclusive practices for all students, including students with disabilities, and evidence-based instruction and intervention strategies throughout course work, clinical experience, and student teaching;
 - (3) adequately prepare candidates for educator certification; and
 - (4) meet the standards and requirements of the board.
- (c) The board shall require that each educator preparation program be reviewed for renewal of approval at least every five years. The board shall adopt an evaluation process to be used in reviewing an educator preparation program for renewal of approval.

Added by Acts 2015, 84th Leg., R.S., Ch. 931 (H.B. [2205](#)), Sec. 5, eff. September 1, 2015.

Amended by:

Acts 2021, 87th Leg., R.S., Ch. 215 (H.B. [159](#)), Sec. 3, eff. September 1, 2021.

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TEC, §21.0451. SANCTIONS UNDER ACCOUNTABILITY SYSTEM FOR EDUCATOR PREPARATION PROGRAMS.

- (a) The board shall propose rules necessary for the sanction of educator preparation programs that do not meet accountability standards or comply with state law or rules and shall at least annually review the accreditation status of each educator preparation program. The rules:
- (1) shall provide for the assignment of the following accreditation statuses:
 - (A) not rated;
 - (B) accredited;
 - (C) accredited-warned;
 - (D) accredited-probation; and
 - (E) not accredited-revoked;
 - (2) may provide for the agency to take any necessary action, including one or more of the following actions:
 - (A) requiring the program to obtain technical assistance approved by the agency or board;
 - (B) requiring the program to obtain professional services under contract with another person;
 - (C) appointing a monitor to participate in and report to the board on the activities of the program; and
 - (D) if a program has been rated as accredited-probation under the Accountability System for Educator Preparation for a period of at least one year, revoking the approval of the program and ordering the program to be closed, provided that the board or agency has provided the opportunity for a contested case hearing;
 - (3) shall provide for the agency to revoke the approval of the program and order the program to be closed if the program has been rated as accredited-probation under the Accountability System for Educator Preparation for three consecutive years, provided that the board or agency has provided the opportunity for a contested case hearing; and
 - (4) shall provide the board procedure for changing the accreditation status of a program that:

- (A) does not meet the accreditation standards established under Section [21.045\(a\)](#); or
 - (B) violates a board or agency regulation.
- (b) Any action authorized or required to be taken against an educator preparation program under Subsection (a) may also be taken with regard to a particular field of certification authorized to be offered by an educator preparation program.
- (c) A revocation must be effective for a period of at least two years. After two years, the program may seek renewed approval to prepare educators for state certification.
- (d) The costs of technical assistance required under Subsection (a)(2)(A) or the costs associated with the appointment of a monitor under Subsection (a)(2)(C) shall be paid by the educator preparation program.

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TEC, §21.0452. CONSUMER INFORMATION REGARDING EDUCATOR PREPARATION PROGRAMS.

- (a) To assist persons interested in obtaining teaching certification in selecting an educator preparation program and assist school districts in making staffing decisions, the board shall make information regarding educator programs in this state available to the public through the board's Internet website.
- (b) The board shall make available at least the following information regarding each educator preparation program:
 - (1) the information specified in Sections [21.045\(a\)](#) and (b);
 - (2) in addition to any other appropriate information indicating the quality of persons admitted to the program, the average academic qualifications possessed by persons admitted to the program, including:
 - (A) average overall grade point average and average grade point average in specific subject areas; and
 - (B) average scores on the Scholastic Assessment Test (SAT), the American College Test (ACT), or the Graduate Record Examination (GRE), as applicable;
 - (3) the degree to which persons who complete the program are successful in obtaining teaching positions;
 - (4) the extent to which the program prepares teachers, including general education teachers and special education teachers, to effectively teach:
 - (A) students with disabilities; and
 - (B) emergent bilingual students, as defined by Section [29.052](#);
 - (5) the activities offered by the program that are designed to prepare teachers to:
 - (A) integrate technology effectively into curricula and instruction, including activities consistent with the principles of universal design for learning; and
 - (B) use technology effectively to collect, manage, and analyze data to improve teaching and learning for the purpose of increasing student academic achievement;
 - (6) for each semester, the average ratio of field supervisors to candidates completing student teaching, clinical teaching, or an internship in an educator preparation program;
 - (7) the perseverance of beginning teachers in the profession, based on information reported through the Public Education Information Management System (PEIMS) providing the

- number of beginning teachers employed as classroom teachers for at least three years after certification in comparison to similar programs;
- (8) the results of exit surveys given to program participants on completion of the program that involve evaluation of the program's effectiveness in preparing participants to succeed in the classroom;
 - (9) the results of surveys given to school principals that involve evaluation of the program's effectiveness in preparing participants to succeed in the classroom, based on experience with employed program participants; and
 - (10) the results of teacher satisfaction surveys developed under Section [21.045](#) and given to program participants at the end of the first year of teaching.
- (c) For purposes of Subsection (b)(9), the board shall require an educator preparation program to distribute an exit survey that a program participant must complete before the participant is eligible to receive a certificate under this subchapter.
 - (d) For purposes of Subsections (b)(9) and (10), the board shall develop surveys for distribution to program participants and school principals.
 - (e) The board may develop procedures under which each educator preparation program receives a designation or ranking based on the information required to be made available under Subsection (b). If the board develops procedures under this subsection, the designation or ranking received by each program must be included in the information made available under this section.
 - (f) In addition to other information required to be made available under this section, the board shall provide information identifying employment opportunities for teachers in the various regions of this state. The board shall specifically identify each region of this state in which a shortage of qualified teachers exists.
 - (g) The board may require any person to provide information to the board for purposes of this section.

Added by Acts 2009, 81st Leg., R.S., Ch. 723 (S.B. [174](#)), Sec. 2, eff. June 19, 2009.

Amended by:

Acts 2015, 84th Leg., R.S., Ch. 931 (H.B. [2205](#)), Sec. 8, eff. September 1, 2015.

Acts 2019, 86th Leg., R.S., Ch. 573 (S.B. [241](#)), Sec. 1.01, eff. September 1, 2019.

Acts 2019, 86th Leg., R.S., Ch. 597 (S.B. [668](#)), Sec. 1.02, eff. June 10, 2019.

Acts 2021, 87th Leg., R.S., Ch. 973 (S.B. [2066](#)), Sec. 1, eff. September 1, 2021.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE E. STUDENTS AND PARENTS
CHAPTER 25. ADMISSION, TRANSFER, AND ATTENDANCE
SUBCHAPTER A. ADMISSION AND ENROLLMENT

TEC, §25.007. TRANSITION ASSISTANCE FOR STUDENTS WHO ARE HOMELESS OR IN SUBSTITUTE CARE.

- (a) The legislature finds that:
 - (1) students who are homeless or in substitute care are faced with numerous transitions during their formative years; and
 - (2) students who are homeless or in substitute care who move from one school to another are faced with special challenges to learning and future achievement.
- (a-1) Repealed by Acts 2019, 86th Leg., R.S., Ch. 597 (S.B. [668](#)), Sec. 3.01(2), eff. June 10, 2019.
- (b) In recognition of the challenges faced by students who are homeless or in substitute care, the agency shall assist the transition of students who are homeless or in substitute care from one school to another by:
 - (1) ensuring that school records for a student who is homeless or in substitute care are transferred to the student's new school not later than the 10th working day after the date the student begins enrollment at the school;
 - (2) developing systems to ease transition of a student who is homeless or in substitute care during the first two weeks of enrollment at a new school;
 - (3) developing procedures for awarding credit, including partial credit if appropriate, for course work, including electives, completed by a student who is homeless or in substitute care while enrolled at another school;
 - (4) developing procedures to ensure that a new school relies on decisions made by the previous school regarding placement in courses or educational programs of a student who is homeless or in substitute care and places the student in comparable courses or educational programs at the new school, if those courses or programs are available;
 - (5) promoting practices that facilitate access by a student who is homeless or in substitute care to extracurricular programs, summer programs, credit transfer services, electronic courses provided under Chapter [30A](#), and after-school tutoring programs at nominal or no cost;
 - (6) establishing procedures to lessen the adverse impact of the movement of a student who is homeless or in substitute care to a new school;
 - (7) entering into a memorandum of understanding with the Department of Family and Protective Services regarding the exchange of information as appropriate to facilitate the transition of students in substitute care from one school to another;
 - (8) encouraging school districts and open-enrollment charter schools to provide services for a student who is homeless or in substitute care in transition when applying for admission to postsecondary study and when seeking sources of funding for postsecondary study;
 - (9) requiring school districts, campuses, and open-enrollment charter schools to accept a referral for special education services made for a student who is homeless or in substitute care by a school previously attended by the student, and to provide comparable services to the student during the referral process or until the new school develops an individualized education program for the student;

- (10) requiring school districts, campuses, and open-enrollment charter schools to provide notice to the child's educational decision-maker and caseworker regarding events that may significantly impact the education of a child, including:
 - (A) requests or referrals for an evaluation under Section 504, Rehabilitation Act of 1973 (29 U.S.C. Section 794), or special education under Section [29.003](#);
 - (B) admission, review, and dismissal committee meetings;
 - (C) manifestation determination reviews required by Section [37.004\(b\)](#);
 - (D) any disciplinary actions under Chapter [37](#) for which parental notice is required;
 - (E) citations issued for Class C misdemeanor offenses on school property or at school-sponsored activities;
 - (F) reports of restraint and seclusion required by Section [37.0021](#);
 - (G) use of corporal punishment as provided by Section [37.0011](#); and
 - (H) appointment of a surrogate parent for the child under Section [29.0151](#);
 - (11) developing procedures for allowing a student who is homeless or in substitute care who was previously enrolled in a course required for graduation the opportunity, to the extent practicable, to complete the course, at no cost to the student, before the beginning of the next school year;
 - (12) ensuring that a student who is homeless or in substitute care who is not likely to receive a high school diploma before the fifth school year following the student's enrollment in grade nine, as determined by the district, has the student's course credit accrual and personal graduation plan reviewed;
 - (13) ensuring that a student in substitute care who is in grade 11 or 12 be provided information regarding tuition and fee exemptions under Section [54.366](#) for dual-credit or other courses provided by a public institution of higher education for which a high school student may earn joint high school and college credit;
 - (14) designating at least one agency employee to act as a liaison officer regarding educational issues related to students in the conservatorship of the Department of Family and Protective Services; and
 - (15) providing other assistance as identified by the agency.
- (c) The commissioner may establish rules to implement this section and to facilitate the transition between schools of children who are homeless or in substitute care.

TEXAS EDUCATION CODE
CHAPTER 28. COURSES OF STUDY; ADVANCEMENT
SUBCHAPTER A. ESSENTIAL KNOWLEDGE AND SKILLS; CURRICULUM

TEC, §28.002. REQUIRED CURRICULUM.

- (a) Each school district that offers kindergarten through grade 12 shall offer, as a required curriculum:
- (1) a foundation curriculum that includes:
 - (A) English language arts;
 - (B) mathematics;
 - (C) science; and
 - (D) social studies, consisting of Texas, United States, and world history, government, economics, with emphasis on the free enterprise system and its benefits, and geography; and
 - (2) an enrichment curriculum that includes:
 - (A) to the extent possible, languages other than English;
 - (B) health, with emphasis on:
 - (i) physical health, including the importance of proper nutrition and exercise;
 - (ii) mental health, including instruction about mental health conditions, substance abuse, skills to manage emotions, establishing and maintaining positive relationships, and responsible decision-making; and
 - (iii) suicide prevention, including recognizing suicide-related risk factors and warning signs;
 - (C) physical education;
 - (D) fine arts;
 - (E) career and technology education;
 - (F) technology applications;
 - (G) religious literature, including the Hebrew Scriptures (Old Testament) and New Testament, and its impact on history and literature; and
 - (H) personal financial literacy.
- (b) The State Board of Education by rule shall designate subjects constituting a well-balanced curriculum to be offered by a school district that does not offer kindergarten through grade 12.
- (b-1) In this section, "common core state standards" means the national curriculum standards developed by the Common Core State Standards Initiative.
- (b-2) The State Board of Education may not adopt common core state standards to comply with a duty imposed under this chapter.
- (b-3) A school district may not use common core state standards to comply with the requirement to provide instruction in the essential knowledge and skills at appropriate grade levels under Subsection (c).
- (b-4) Notwithstanding any other provision of this code, a school district or open-enrollment charter school may not be required to offer any aspect of a common core state standards curriculum.

- (c) The State Board of Education, with the direct participation of educators, parents, business and industry representatives, and employers shall by rule identify the essential knowledge and skills of each subject of the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials under Chapter [31](#) and addressed on the assessment instruments required under Subchapter [B](#), Chapter [39](#). As a condition of accreditation, the board shall require each district to provide instruction in the essential knowledge and skills at appropriate grade levels and to make available to each high school student in the district an Algebra II course.
- (c-1) The State Board of Education shall adopt rules requiring students enrolled in grade levels six, seven, and eight to complete at least one fine arts course during those grade levels as part of a district's fine arts curriculum.
- (c-2) Each time the Texas Higher Education Coordinating Board revises the Internet database of the coordinating board's official statewide inventory of workforce education courses, the State Board of Education shall by rule revise the essential knowledge and skills of any corresponding career and technology education curriculum as provided by Subsection (c).
- (c-3) In adopting the essential knowledge and skills for the technology applications curriculum for kindergarten through grade eight, the State Board of Education shall adopt essential knowledge and skills that include coding, computer programming, computational thinking, and cybersecurity. The State Board of Education shall review and revise, as needed, the essential knowledge and skills of the technology applications curriculum every five years to ensure the curriculum:
 - (1) is relevant to student education; and
 - (2) aligns with current or emerging professions.
- (d) The physical education curriculum required under Subsection (a)(2)(C) must be sequential, developmentally appropriate, and designed, implemented, and evaluated to enable students to develop the motor, self-management, and other skills, knowledge, attitudes, and confidence necessary to participate in physical activity throughout life. Each school district shall establish specific objectives and goals the district intends to accomplish through the physical education curriculum. In identifying the essential knowledge and skills of physical education, the State Board of Education shall ensure that the curriculum:
 - (1) emphasizes the knowledge and skills capable of being used during a lifetime of regular physical activity;
 - (2) is consistent with national physical education standards for:
 - (A) the information that students should learn about physical activity; and
 - (B) the physical activities that students should be able to perform;
 - (3) requires that, on a weekly basis, at least 50 percent of the physical education class be used for actual student physical activity and that the activity be, to the extent practicable, at a moderate or vigorous level;
 - (4) offers students an opportunity to choose among many types of physical activity in which to participate;
 - (5) offers students both cooperative and competitive games;
 - (6) meets the needs of students of all physical ability levels, including students who have a chronic health problem, disability, including a student who is a person with a disability described under Section [29.003](#)(b) or criteria developed by the agency in accordance with

that section, or other special need that precludes the student from participating in regular physical education instruction but who might be able to participate in physical education that is suitably adapted and, if applicable, included in the student's individualized education program;

- (7) takes into account the effect that gender and cultural differences might have on the degree of student interest in physical activity or on the types of physical activity in which a student is interested;
 - (8) teaches self-management and movement skills;
 - (9) teaches cooperation, fair play, and responsible participation in physical activity;
 - (10) promotes student participation in physical activity outside of school; and
 - (11) allows physical education classes to be an enjoyable experience for students.
- (e) American Sign Language is a language for purposes of Subsection (a)(2)(A). A public school may offer an elective course in the language.
- (f) A school district may offer courses for local credit in addition to those in the required curriculum. The State Board of Education shall:
- (1) be flexible in approving a course for credit for high school graduation under this subsection; and
 - (2) approve courses in cybersecurity for credit for high school graduation under this subsection.
- (g) A local instructional plan may draw on state curriculum frameworks and program standards as appropriate. Each district is encouraged to exceed minimum requirements of law and State Board of Education rule. Each district shall ensure that all children in the district participate actively in a balanced curriculum designed to meet individual needs. Before the adoption of a major curriculum initiative, including the use of a curriculum management system, a district must use a process that:
- (1) includes teacher input;
 - (2) provides district employees with the opportunity to express opinions regarding the initiative; and
 - (3) includes a meeting of the board of trustees of the district at which:
 - (A) information regarding the initiative is presented, including the cost of the initiative and any alternatives that were considered; and
 - (B) members of the public and district employees are given the opportunity to comment regarding the initiative.
- (g-1) A district may also offer a course or other activity, including an apprenticeship or training hours needed to obtain an industry-recognized credential or certificate, that is approved by the board of trustees for credit without obtaining State Board of Education approval if:
- (1) the district develops a program under which the district partners with a public or private institution of higher education and local business, labor, and community leaders to develop and provide the courses; and
 - (2) the course or other activity allows students to enter:
 - (A) a career or technology training program in the district's region of the state;

- (B) an institution of higher education without remediation;
 - (C) an apprenticeship training program; or
 - (D) an internship required as part of accreditation toward an industry-recognized credential or certificate for course credit.
- (g-2) Each school district shall annually report to the agency the names of the courses, programs, institutions of higher education, and internships in which the district's students have enrolled under Subsection (g-1) and the names of the courses and institutions of higher education in which the district's students have enrolled under Subsection (g-3). The agency shall make available information provided under this subsection to other districts.
- (g-3) A district may also offer a course in cybersecurity that is approved by the board of trustees for credit without obtaining State Board of Education approval if the district partners with a public or private institution of higher education that offers an undergraduate degree program in cybersecurity to develop and provide the course.
- (h) The State Board of Education and each school district shall require the teaching of informed American patriotism, Texas history, and the free enterprise system in the adoption of instructional materials for kindergarten through grade 12, including the founding documents of the United States. A primary purpose of the public school curriculum is to prepare thoughtful, informed citizens who understand the importance of patriotism and can function productively in a free enterprise society with appreciation for the fundamental democratic principles of our state and national heritage.
- (h-1) In adopting the essential knowledge and skills for the foundation curriculum under Subsection (a)(1), the State Board of Education shall, as appropriate, adopt essential knowledge and skills that develop each student's civic knowledge, including an understanding of:
- (1) the fundamental moral, political, and intellectual foundations of the American experiment in self-government;
 - (2) the history, qualities, traditions, and features of civic engagement in the United States;
 - (3) the structure, function, and processes of government institutions at the federal, state, and local levels; and
 - (4) the founding documents of the United States, including:
 - (A) the entirety of the Declaration of Independence;
 - (B) the entirety of the United States Constitution;
 - (C) the Federalist Papers, including the entirety of Essays 10 and 51;
 - (D) excerpts from Alexis de Tocqueville's *Democracy in America*;
 - (E) the transcript of the first Lincoln-Douglas debate;
 - (F) the writings of the founding fathers of the United States;
 - (G) the entirety of Frederick Douglass's speeches "The Meaning of July Fourth for the Negro" and "What the Black Man Wants"; and
 - (H) the entirety of Martin Luther King Jr.'s speech "I Have a Dream."

Text of subsection as added by Acts 2021, 87th Leg., R.S., Ch. 1005 (H.B. [4509](#)), Sec. 3

Text of subsection effective until December 02, 2021

- (h-2) In providing instruction regarding the founding documents of the United States as described by Subsection (h-1)(4), a school district or open-enrollment charter school shall use those documents as part of the instructional materials for the instruction.

Text of subsection as added by Acts 2021, 87th Leg., R.S., Ch. 772 (H.B. [3979](#)), Sec. 1

Text of subsection effective until December 02, 2021

- (h-2) In adopting the essential knowledge and skills for the social studies curriculum, the State Board of Education shall adopt essential knowledge and skills that develop each student's civic knowledge, including an understanding of:
- (1) the fundamental moral, political, and intellectual foundations of the American experiment in self-government;
 - (2) the history, qualities, traditions, and features of civic engagement in the United States;
 - (3) the history of Native Americans;
 - (4) the structure, function, and processes of government institutions at the federal, state, and local levels;
 - (5) the founding documents of the United States, including:
 - (A) the Declaration of Independence;
 - (B) the United States Constitution;
 - (C) the Federalist Papers;
 - (D) the transcript of the first Lincoln-Douglas debate;
 - (E) the writings of and about the founding fathers and mothers and other founding persons of the United States, including the writings of:
 - (i) George Washington;
 - (ii) Ona Judge;
 - (iii) Thomas Jefferson;
 - (iv) Sally Hemings; and
 - (v) any other founding persons of the United States;
 - (F) writings from Frederick Douglass's newspaper, the North Star;
 - (G) the Book of Negroes;
 - (H) the Fugitive Slave Acts of 1793 and 1850;
 - (I) the Indian Removal Act;
 - (J) Thomas Jefferson's letter to the Danbury Baptists; and
 - (K) William Still's Underground Railroad Records;
 - (6) historical documents related to the civic accomplishments of marginalized populations, including documents related to:
 - (A) the Chicano movement;

- (B) women's suffrage and equal rights;
 - (C) the civil rights movement;
 - (D) the Snyder Act of 1924; and
 - (E) the American labor movement;
- (7) the history of white supremacy, including but not limited to the institution of slavery, the eugenics movement, and the Ku Klux Klan, and the ways in which it is morally wrong;
- (8) the history and importance of the civil rights movement, including the following documents:
- (A) Martin Luther King Jr.'s "Letter from a Birmingham Jail" and "I Have a Dream" speech;
 - (B) the federal Civil Rights Act of 1964 (42 U.S.C. Section 2000a et seq.);
 - (C) the United States Supreme Court's decision in *Brown v. Board of Education*;
 - (D) the Emancipation Proclamation;
 - (E) the Universal Declaration of Human Rights;
 - (F) the Thirteenth, Fourteenth, and Fifteenth Amendments to the United States Constitution;
 - (G) the United States Court of Appeals for the Ninth Circuit decision in *Mendez v. Westminster*;
 - (H) Frederick Douglass's *Narrative of the Life of Frederick Douglass, an American Slave*;
 - (I) the life and work of Cesar Chavez; and
 - (J) the life and work of Dolores Huerta;
- (9) the history and importance of the women's suffrage movement, including the following documents:
- (A) the federal Voting Rights Act of 1965 (52 U.S.C. Section 10101 et seq.);
 - (B) the Fifteenth, Nineteenth, and Twenty-Sixth Amendments to the United States Constitution;
 - (C) Abigail Adams's letter "Remember the Ladies";
 - (D) the works of Susan B. Anthony; and
 - (E) the Declaration of Sentiments;
- (10) the life and works of Dr. Hector P. Garcia;
- (11) the American GI Forum;
- (12) the League of United Latin American Citizens; and
- (13) *Hernandez v. Texas* (1954).

Text of subsection effective on December 02, 2021

- (h-2) In adopting the essential knowledge and skills for the social studies curriculum for each grade level from kindergarten through grade 12, the State Board of Education shall adopt essential knowledge and skills that develop each student's civic knowledge, including:
- (1) an understanding of:
 - (A) the fundamental moral, political, entrepreneurial, and intellectual foundations of the American experiment in self-government;
 - (B) the history, qualities, traditions, and features of civic engagement in the United States;
 - (C) the structure, function, and processes of government institutions at the federal, state, and local levels; and
 - (D) the founding documents of the United States;
 - (2) the ability to:
 - (A) analyze and determine the reliability of information sources;
 - (B) formulate and articulate reasoned positions;
 - (C) understand the manner in which local, state, and federal government works and operates through the use of simulations and models of governmental and democratic processes;
 - (D) actively listen and engage in civil discourse, including discourse with those with different viewpoints; and
 - (E) participate as a citizen in a constitutional democracy by voting; and
 - (3) an appreciation of:
 - (A) the importance and responsibility of participating in civic life;
 - (B) a commitment to the United States and its form of government; and
 - (C) a commitment to free speech and civil discourse.

Text of subsection effective until December 02, 2021

- (h-3) For any social studies course in the required curriculum:
- (1) a teacher may not be compelled to discuss a particular current event or widely debated and currently controversial issue of public policy or social affairs;
 - (2) a teacher who chooses to discuss a topic described by Subdivision (1) shall, to the best of the teacher's ability, strive to explore the topic from diverse and contending perspectives without giving deference to any one perspective;
 - (3) a school district, open-enrollment charter school, or teacher may not require, make part of a course, or award a grade or course credit, including extra credit, for a student's:
 - (A) political activism, lobbying, or efforts to persuade members of the legislative or executive branch at the federal, state, or local level to take specific actions by direct communication; or
 - (B) participation in any internship, practicum, or similar activity involving social or public policy advocacy; and

- (4) a teacher, administrator, or other employee of a state agency, school district, or open-enrollment charter school may not:
- (A) be required to engage in training, orientation, or therapy that presents any form of race or sex stereotyping or blame on the basis of race or sex;
 - (B) require or make part of a course the concept that:
 - (i) one race or sex is inherently superior to another race or sex;
 - (ii) an individual, by virtue of the individual's race or sex, is inherently racist, sexist, or oppressive, whether consciously or unconsciously;
 - (iii) an individual should be discriminated against or receive adverse treatment solely or partly because of the individual's race;
 - (iv) members of one race or sex cannot and should not attempt to treat others without respect to race or sex;
 - (v) an individual's moral character, standing, or worth is necessarily determined by the individual's race or sex;
 - (vi) an individual, by virtue of the individual's race or sex, bears responsibility for actions committed in the past by other members of the same race or sex;
 - (vii) an individual should feel discomfort, guilt, anguish, or any other form of psychological distress on account of the individual's race or sex;
 - (viii) meritocracy or traits such as a hard work ethic are racist or sexist or were created by members of a particular race to oppress members of another race;
 - (ix) the advent of slavery in the territory that is now the United States constituted the true founding of the United States; or
 - (x) with respect to their relationship to American values, slavery and racism are anything other than deviations from, betrayals of, or failures to live up to, the authentic founding principles of the United States, which include liberty and equality; and
 - (C) require an understanding of The 1619 Project.

Text of subsection effective on December 02, 2021

(h-3) Repealed by Acts 2021, 87th Leg., 2nd C.S., Ch. 9 (S.B. 3), Sec. 6, eff. December 2, 2021.

Text of subsection effective until December 02, 2021

(h-4) A state agency, school district, or open-enrollment charter school may not accept private funding for the purpose of developing a curriculum, purchasing or selecting curriculum materials, or providing teacher training or professional development for a course described by Subsection (h-3)(3).

Text of subsection effective on December 02, 2021

(h-4) Repealed by Acts 2021, 87th Leg., 2nd C.S., Ch. 9 (S.B. [3](#)), Sec. 6, eff. December 2, 2021.

Text of subsection effective until December 02, 2021

(h-5) A school district or open-enrollment charter school may not implement, interpret, or enforce any rules or student code of conduct in a manner that would result in the punishment of a student for discussing, or have a chilling effect on student discussion of, the concepts described by Subsection (h-3)(4).

Text of subsection effective on December 02, 2021

(h-5) Repealed by Acts 2021, 87th Leg., 2nd C.S., Ch. 9 (S.B. [3](#)), Sec. 6, eff. December 2, 2021.

Text of subsection effective on December 02, 2021

(h-6) In providing instruction regarding the founding documents of the United States as described by Subsection (h-1)(4), a school district or open-enrollment charter school shall use those documents as part of the instructional materials for the instruction.

Text of subsection effective on December 02, 2021

(h-7) The agency shall ensure that each school district or open-enrollment charter school teaches civics education as part of the district's social studies curriculum in a manner consistent with the essential knowledge and skills adopted under Subsection (h-2).

Text of subsection effective on December 02, 2021

(h-8) Nothing in Subsection (h-2) or (h-7) may be construed as limiting the teaching of or instruction in the essential knowledge and skills adopted under this subchapter.

(i) The State Board of Education shall adopt rules for the implementation of this subchapter. Except as provided by Subsection (j), the board may not adopt rules that designate the methodology used by a teacher or the time spent by a teacher or a student on a particular task or subject.

(j) The State Board of Education by rule may require laboratory instruction in secondary science courses and may require a specific amount or percentage of time in a secondary science course that must be laboratory instruction.

- (k) The State Board of Education, in consultation with the Department of State Health Services and the Texas Diabetes Council, shall develop a diabetes education program that a school district may use in the health curriculum under Subsection (a)(2)(B).
- (l) A school district shall require a student enrolled in full-day prekindergarten, in kindergarten, or in a grade level below grade six to participate in moderate or vigorous daily physical activity for at least 30 minutes throughout the school year as part of the district's physical education curriculum or through structured activity during a school campus's daily recess. To the extent practicable, a school district shall require a student enrolled in prekindergarten on less than a full-day basis to participate in the same type and amount of physical activity as a student enrolled in full-day prekindergarten. A school district shall require students enrolled in grade levels six, seven, and eight to participate in moderate or vigorous daily physical activity for at least 30 minutes for at least four semesters during those grade levels as part of the district's physical education curriculum. If a school district determines, for any particular grade level below grade six, that requiring moderate or vigorous daily physical activity is impractical due to scheduling concerns or other factors, the district may as an alternative require a student in that grade level to participate in moderate or vigorous physical activity for at least 135 minutes during each school week. Additionally, a school district may as an alternative require a student enrolled in a grade level for which the district uses block scheduling to participate in moderate or vigorous physical activity for at least 225 minutes during each period of two school weeks. A school district must provide for an exemption for:
 - (1) any student who is unable to participate in the required physical activity because of illness or disability; and
 - (2) a middle school or junior high school student who participates in an extracurricular activity with a moderate or vigorous physical activity component that is considered a structured activity under rules adopted by the commissioner.
- (l-1) In adopting rules relating to an activity described by Subsection (l)(2), the commissioner may permit an exemption for a student who participates in a school-related activity or an activity sponsored by a private league or club only if the student provides proof of participation in the activity.
- (l-2) To encourage school districts to promote physical activity for children through classroom curricula for health and physical education, the agency, in consultation with the Department of State Health Services, shall designate nationally recognized health and physical education program guidelines that a school district may use in the health curriculum under Subsection (a)(2)(B) or the physical education curriculum under Subsection (a)(2)(C).
 - (l-3) (1) This subsection may be cited as "Lauren's Law."
 - (2) The State Board of Education, the Department of State Health Services, or a school district may not adopt any rule, policy, or program under Subsections (a), (k), (l), (l-1), or (l-2) that would prohibit a parent or grandparent of a student from providing any food product of the parent's or grandparent's choice to:
 - (A) children in the classroom of the child of the parent or grandparent on the occasion of the child's birthday; or
 - (B) children at a school-designated function.
- (m) Section [2001.039](#), Government Code, as added by Chapter 1499, Acts of the 76th Legislature, Regular Session, 1999, does not apply to a rule adopted by the State Board of Education under Subsection (c) or (d).

- (n) The State Board of Education may by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technology education curriculum under Subsection (a)(2)(E).
- (o) In approving career and technology courses, the State Board of Education must determine that at least 50 percent of the approved courses are cost-effective for a school district to implement.
- (p) The State Board of Education, in conjunction with the office of the attorney general, shall develop a parenting and paternity awareness program that a school district shall use in the district's high school health curriculum. A school district may use the program developed under this subsection in the district's middle or junior high school curriculum. At the discretion of the district, a teacher may modify the suggested sequence and pace of the program at any grade level. The program must:
 - (1) address parenting skills and responsibilities, including child support and other legal rights and responsibilities that come with parenthood;
 - (2) address relationship skills, including money management, communication skills, and marriage preparation; and
 - (3) in district middle, junior high, or high schools that do not have a family violence prevention program, address skills relating to the prevention of family violence.
- (p-2) A school district may develop or adopt research-based programs and curriculum materials for use in conjunction with the program developed under Subsection (p). The programs and curriculum materials may provide instruction in:
 - (1) child development;
 - (2) parenting skills, including child abuse and neglect prevention; and
 - (3) assertiveness skills to prevent teenage pregnancy, abusive relationships, and family violence.
- (p-3) The agency shall evaluate programs and curriculum materials developed under Subsection (p-2) and distribute to other school districts information regarding those programs and materials.
- (p-4) A student under 14 years of age may not participate in a program developed under Subsection (p) without the permission of the student's parent or person standing in parental relation to the student.
- (q) Repealed by Acts 2013, 83rd Leg., R.S., Ch. 211, Sec. 78(b)(1), eff. September 1, 2014.
- (r) In adopting the essential knowledge and skills for the health curriculum under Subsection (a)(2)(B), the State Board of Education shall adopt essential knowledge and skills that address the science, risk factors, causes, dangers, consequences, signs, symptoms, and treatment of substance abuse, including the use of illegal drugs, abuse of prescription drugs, abuse of alcohol such as by binge drinking or other excessive drinking resulting in alcohol poisoning, inhaling solvents, and other forms of substance abuse. The agency shall compile a list of evidence-based substance abuse awareness programs from which a school district shall choose a program to use in the district's middle school, junior high school, and high school health curriculum. In this subsection, "evidence-based substance abuse awareness program" means a program, practice, or strategy that has been proven to effectively prevent substance abuse among students, as determined by evaluations that are evidence-based.
- (s) In this subsection, "bullying" has the meaning assigned by Section [37.0832](#) and "harassment" has the meaning assigned by Section [37.001](#). In addition to any other essential knowledge and skills the State Board of Education adopts for the health curriculum under Subsection (a)(2)(B), the

board shall adopt for the health curriculum, in consultation with the Texas School Safety Center, essential knowledge and skills that include evidence-based practices that will effectively address awareness, prevention, identification, self-defense in response to, and resolution of and intervention in bullying and harassment.

- (t) The State Board of Education, in consultation with the commissioner of higher education and business and industry leaders, shall develop an advanced language course that a school district may use in the curriculum under Subsection (a)(2)(A) to provide students with instruction in industry-related terminology that prepares students to communicate in a language other than English in a specific professional, business, or industry environment.
- (w) Repealed by Acts 2019, 86th Leg., R.S., Ch. 352 (H.B. [18](#)), Sec. 4.01(2), eff. December 1, 2019.
- (z) The State Board of Education by rule shall require each school district to incorporate instruction in digital citizenship into the district's curriculum, including information regarding the potential criminal consequences of cyberbullying. In this subsection:
 - (1) "Cyberbullying" has the meaning assigned by Section [37.0832](#).
 - (2) "Digital citizenship" means the standards of appropriate, responsible, and healthy online behavior, including the ability to access, analyze, evaluate, create, and act on all forms of digital communication.

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CHAPTER 28. COURSES OF STUDY; ADVANCEMENT
SUBCHAPTER A. ESSENTIAL KNOWLEDGE AND SKILLS; CURRICULUM

TEC, §28.008. ADVANCEMENT OF COLLEGE READINESS IN CURRICULUM.

- (a) To ensure that students are able to perform college-level course work at institutions of higher education, the commissioner of education and the commissioner of higher education shall establish vertical teams composed of public school educators and institution of higher education faculty.
- (b) The vertical teams shall:
 - (1) recommend for approval by the commissioner of education and the Texas Higher Education Coordinating Board college readiness standards and expectations that address what students must know and be able to do to succeed in entry-level courses offered at institutions of higher education;
 - (2) evaluate whether the high school curriculum requirements under Section [28.002](#) and other instructional requirements serve to prepare students to successfully perform college-level course work;
 - (3) recommend how the public school curriculum requirements can be aligned with college readiness standards and expectations;
 - (4) develop instructional strategies for teaching courses to prepare students to successfully perform college-level course work;
 - (5) develop or establish minimum standards for curricula, professional development materials, and online support materials in English language arts, mathematics, science, and social studies, designed for students who need additional assistance in preparing to successfully perform college-level course work; and
 - (6) periodically review and revise the college readiness standards and expectations developed under Subdivision (1) and recommend revised standards for approval by the commissioner of education and the Texas Higher Education Coordinating Board.
- (c) The commissioner of education and the Texas Higher Education Coordinating Board by rule shall:
 - (1) establish the composition and duties of the vertical teams established under this section; and
 - (2) establish a schedule for the periodic review required under Subsection (b)(6), giving consideration to the cycle of review and identification under Section [28.002](#) of the essential knowledge and skills of subjects of the required curriculum.
- (d) The State Board of Education shall incorporate college readiness standards and expectations approved by the commissioner of education and the Texas Higher Education Coordinating Board under Subsection (b) into the essential knowledge and skills identified by the board under Section [28.002\(c\)](#). The State Board of Education shall develop and by rule adopt a chart that clearly indicates the alignment of the college readiness standards and expectations with the essential knowledge and skills identified by the board under Section [28.002\(c\)](#).
- (e) Notwithstanding any other provision of this section, the State Board of Education retains its authority under Section [28.002](#) concerning the required curriculum.
- (g) The agency shall coordinate with the Texas Higher Education Coordinating Board as necessary in administering this section.

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TEC, §28.011. ELECTIVE COURSES ON THE BIBLE'S HEBREW SCRIPTURES (OLD TESTAMENT) AND NEW TESTAMENT AND THEIR IMPACT ON THE HISTORY AND LITERATURE OF WESTERN CIVILIZATION.

- (a) A school district may offer to students in grade six or above:
 - (1) an elective course on the Hebrew Scriptures (Old Testament) and its impact and an elective course on the New Testament and its impact; or
 - (2) an elective course that combines the courses described by Subdivision (1).
- (b) The purpose of a course under this section is to:
 - (1) teach students knowledge of biblical content, characters, poetry, and narratives that are prerequisites to understanding contemporary society and culture, including literature, art, music, mores, oratory, and public policy; and
 - (2) familiarize students with, as applicable:
 - (A) the contents of the Hebrew Scriptures or New Testament;
 - (B) the history of the Hebrew Scriptures or New Testament;
 - (C) the literary style and structure of the Hebrew Scriptures or New Testament; and
 - (D) the influence of the Hebrew Scriptures or New Testament on law, history, government, literature, art, music, customs, morals, values, and culture.
- (c) A student may not be required to use a specific translation as the sole text of the Hebrew Scriptures or New Testament and may use as the basic instructional material a different translation of the Hebrew Scriptures or New Testament from that chosen by the board of trustees of the student's school district or the student's teacher.
- (d) A course offered under this section shall follow applicable law and all federal and state guidelines in maintaining religious neutrality and accommodating the diverse religious views, traditions, and perspectives of students in their school district. A course under this section shall not endorse, favor, or promote, or disfavor or show hostility toward, any particular religion or nonreligious faith or religious perspective. Nothing in this statute is intended to violate any provision of the United States Constitution or federal law, the Texas Constitution or any state law, or any rules or guidelines provided by the United States Department of Education or the Texas Education Agency.
- (e) Before adopting rules identifying the essential knowledge and skills of a course offered under this section, the State Board of Education shall submit the proposed essential knowledge and skills to the attorney general. The attorney general shall review the proposed essential knowledge and

- skills to ensure that the course complies with the First Amendment to the United States Constitution, and the board may not adopt rules identifying the essential knowledge and skills of a course offered under this section without the attorney general's approval under this subsection.
- (f) A teacher of a course offered under this section must hold a certificate in language arts, social studies, or history that qualifies the teacher to teach at the grade level at which the course is offered with, where practical, a minor in religion or biblical studies. A teacher selected to teach a course under this section shall successfully complete staff development training outlined in Section [21.459](#). A course under this section may be taught only by a teacher who has successfully completed training under Section [21.459](#).
 - (g) For the purpose of a student earning credit for high school graduation, a school district shall grant one-half academic elective credit for satisfactory completion of a course on the Hebrew Scriptures, one-half academic elective credit for satisfactory completion of a course on the New Testament, and one-half academic elective credit for satisfactory completion of a combined course on both the Hebrew Scriptures and the New Testament. This subsection applies only to a course that is taught in strict compliance with this section.
 - (h) If, for a particular semester, fewer than 15 students at a school district campus register to enroll in a course required by this section, the district is not required to offer the course at that campus for that semester.
 - (i) This section does not prohibit the board of trustees of a school district from offering an elective course based on the books of a religion other than Christianity. In determining whether to offer such a course, the board may consider various factors, including student and parent demand for such a course and the impact such books have had on history and culture.
 - (j) This section does not prohibit a school district from offering a course, other than the course authorized by this section, in the academic study of the Hebrew Scriptures, the New Testament, or both for local credit or for state elective credit towards high school graduation.

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TEC, §28.012. INSTRUCTION ON INTERACTION WITH LAW ENFORCEMENT.

- (a) In this section:
 - (1) "Board" means the State Board of Education.
 - (2) "Commission" means the Texas Commission on Law Enforcement.
 - (3) "Driver training school" has the meaning assigned by Section 1001.001.
- (b) The board and the commission shall enter into a memorandum of understanding that establishes each agency's respective responsibilities in developing instruction, including curriculum and instructional modules, on proper interaction with peace officers during traffic stops and other in-person encounters. The instruction must include information regarding:
 - (1) the role of law enforcement and the duties and responsibilities of peace officers;
 - (2) a person's rights concerning interactions with peace officers;
 - (3) proper behavior for civilians and peace officers during interactions;
 - (4) laws regarding questioning and detention by peace officers, including any law requiring a person to present proof of identity to a peace officer, and the consequences for a person's or officer's failure to comply with those laws; and
 - (5) how and where to file a complaint against or a compliment on behalf of a peace officer.
- (c) In developing the instruction under this section, the board and the commission may consult with any interested party, including a volunteer work group convened for the purpose of making recommendations regarding the instruction.
- (d) Before finalizing any instruction under this section, the board and the commission shall provide a reasonable period for public comment.
- (e) Subject to rules adopted by the board, a school district or open-enrollment charter school may tailor the instruction developed under this section as appropriate for the district's or school's community. In tailoring the instruction, the district or school shall solicit input from local law enforcement agencies, driver training schools, and the community.

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TEC, §28.014. COLLEGE PREPARATORY COURSES.

- (a) Each school district shall partner with at least one institution of higher education to develop and provide courses in college preparatory mathematics and English language arts. The courses must be designed:
 - (1) for students at the 12th grade level whose performance on:
 - (A) an end-of-course assessment instrument required under Section [39.023\(c\)](#) does not meet college readiness standards; or
 - (B) coursework, a college entrance examination, or an assessment instrument designated under Section [51.334](#) indicates that the student is not ready to perform entry-level college coursework; and
 - (2) to prepare students for success in entry-level college courses.
- (b) A course developed under this section must be provided:
 - (1) on the campus of the high school offering the course; or
 - (2) through distance learning or as an online course provided through an institution of higher education with which the school district partners as provided by Subsection (a).
- (c) Appropriate faculty of each high school offering courses under this section and appropriate faculty of each institution of higher education with which the school district partners shall meet regularly as necessary to ensure that each course is aligned with college readiness expectations. The commissioner of education, in coordination with the commissioner of higher education, may adopt rules to administer this subsection.
- (d) Each school district shall provide a notice to each district student to whom Subsection (a) applies and the student's parent or guardian regarding the benefits of enrolling in a course under this section.
- (e) A student who successfully completes an English language arts course developed under this section may use the credit earned in the course toward satisfying the advanced English language arts curriculum requirement for the foundation high school program under Section [28.025\(b-1\)\(1\)](#). A student who successfully completes a mathematics course developed under this section may use the credit earned in the course toward satisfying an advanced mathematics curriculum requirement under Section [28.025](#) after completion of the mathematics curriculum requirements for the foundation high school program under Section [28.025\(b-1\)\(2\)](#).

- (f) A course provided under this section may be offered for dual credit at the discretion of the institution of higher education with which a school district partners under this section.
- (g) Each school district, in consultation with each institution of higher education with which the district partners, shall develop or purchase instructional materials for a course developed under this section consistent with Chapter [31](#). The instructional materials must include technology resources that enhance the effectiveness of the course and draw on established best practices.

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TEC, §28.018. ADVANCED COMPUTER SCIENCE PROGRAM.

- (a) The State Board of Education by rule shall develop and implement a program under which:
 - (1) students in participating school districts may comply with the curriculum requirements for an advanced mathematics credit under Section 28.025(b-1)(2) or an advanced science credit under Section 28.025(b-1)(3) by successfully completing an advanced computer science course; and
 - (2) participating school districts implement rigorous standards, as developed by the State Board of Education, for advanced computer science courses that are focused on the creation and use of software and computing technologies.
- (b) The commissioner shall adopt rules as necessary to administer this section.

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TEC, §28.0023. CARDIOPULMONARY RESUSCITATION AND AUTOMATED EXTERNAL DEFIBRILLATOR INSTRUCTION.

- (a) Repealed by Acts 2013, 83rd Leg., R.S., Ch. 1269, Sec. 3, eff. June 14, 2013.
- (b) The State Board of Education by rule shall require instruction in cardiopulmonary resuscitation for students in grades 7 through 12.
- (c) A school district or open-enrollment charter school shall provide instruction to students in grades 7 through 12 in cardiopulmonary resuscitation in a manner consistent with the requirements of this section and State Board of Education rules adopted under this section. The instruction may be provided as a part of any course. A student shall receive the instruction at least once before graduation.
- (d) A school administrator may waive the curriculum requirement under this section for an eligible student who has a disability.
- (e) Cardiopulmonary resuscitation instruction must include training that has been developed:
 - (1) by the American Heart Association or the American Red Cross; or
 - (2) using nationally recognized, evidence-based guidelines for emergency cardiovascular care and incorporating psychomotor skills to support the instruction.
- (f) For purposes of Subsection (e), "psychomotor skills" means hands-on practice to support cognitive learning. The term does not include cognitive-only instruction and training.
- (g) A school district or open-enrollment charter school may use emergency medical technicians, paramedics, police officers, firefighters, representatives of the American Heart Association or the American Red Cross, teachers, other school employees, or other similarly qualified individuals to provide instruction and training under this section. Instruction provided under this section is not required to result in certification in cardiopulmonary resuscitation. If instruction is intended to result in certification in cardiopulmonary resuscitation, the course instructor must be authorized to provide the instruction by the American Heart Association, the American Red Cross, or a similar nationally recognized association.

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TEC, §28.023. CREDIT BY EXAMINATION.

- (a) Using guidelines established by the State Board of Education, a school district shall develop or select for review by the district board of trustees examinations for acceleration for each primary school grade level and for credit for secondary school academic subjects. The guidelines must provide for the examinations to thoroughly test comprehension of the information presented in the applicable grade level or subject. The board of trustees shall approve for each subject, to the extent available, at least four examinations that satisfy State Board of Education guidelines. The examinations approved by the board of trustees must include:
 - (1) advanced placement examinations developed by the College Board; and
 - (2) examinations administered through the College-Level Examination Program.
- (b) A school district shall give a student in a primary grade level credit for a grade level and advance the student one grade level on the basis of an examination for acceleration approved by the board of trustees under Subsection (a) if:
 - (1) the student scores in the 80th percentile or above on each section of the examination;
 - (2) a district representative recommends that the student be advanced; and
 - (3) the student's parent or guardian gives written approval of the advancement.
- (c) A school district shall give a student in grade level six or above credit for a subject on the basis of an examination for credit in the subject approved by the board of trustees under Subsection (a) if the student scores in the 80th percentile or above on the examination or if the student achieves a score as provided by Subsection (c-1). If a student is given credit in a subject on the basis of an examination, the district shall enter the examination score on the student's transcript and the student is not required to take an end-of-course assessment instrument adopted under Section 39.023(c) for that subject.
- (c-1) A school district shall give a student in grade level six or above credit for a subject if the student scores:

- (1) a three or higher on an advanced placement examination approved by the board of trustees under Subsection (a) and developed by the College Board; or
 - (2) a scaled score of 50 or higher on an examination approved by the board of trustees under Subsection (a) and administered through the College-Level Examination Program.
- (d) Each district shall administer each examination approved by the board of trustees under Subsection (a) not fewer than four times each year, at times to be determined by the State Board of Education.
- (e) Subsection (d) does not apply to an examination that has an administration date that is established by an entity other than the school district.
- (f) A student may not attempt more than two times to receive credit for a particular subject on the basis of an examination for credit in that subject.
- (g) If a student fails to achieve the designated score described by Subsection (c) or (c-1) on an applicable examination described by Subsection (c) or (c-1) for a subject before the beginning of the school year in which the student would ordinarily be required to enroll in a course in that subject in accordance with the school district's prescribed course sequence, the student must satisfactorily complete the course to receive credit for the course.
- (h) This subsection applies only to a school district surrounded by a school district described by Section 11.065(a). Notwithstanding any other provision of this section, a school district's board of trustees may establish a minimum required score for each section of an examination for acceleration or an examination for credit approved by the board under Subsection (a) that is higher than the minimum required scores under Subsections (b) and (c), respectively. A minimum required score established by a board of trustees under this subsection:
- (1) may be no greater than a score in the 90th percentile;
 - (2) must be established before the beginning of a school year for examinations to be administered in the school year; and
 - (3) must apply for at least the entire school year.

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ACADEMIC ACHIEVEMENT RECORD

TEC, §28.025. HIGH SCHOOL DIPLOMA AND CERTIFICATE; ACADEMIC ACHIEVEMENT RECORD.

- (a) The State Board of Education by rule shall determine curriculum requirements for the foundation high school program that are consistent with the required curriculum under Section [28.002](#). The State Board of Education shall designate the specific courses in the foundation curriculum under Section [28.002\(a\)\(1\)](#) required under the foundation high school program. Except as provided by this section, the State Board of Education may not designate a specific course or a specific number of credits in the enrichment curriculum as requirements for the program.
- (b) A school district shall ensure that each student, on entering ninth grade, indicates in writing an endorsement under Subsection (c-1) that the student intends to earn. A district shall permit a student to choose, at any time, to earn an endorsement other than the endorsement the student previously indicated. A student may graduate under the foundation high school program without earning an endorsement if, after the student's sophomore year:
 - (1) the student and the student's parent or person standing in parental relation to the student are advised by a school counselor of the specific benefits of graduating from high school with one or more endorsements; and
 - (2) the student's parent or person standing in parental relation to the student files with a school counselor written permission, on a form adopted by the agency, allowing the student to graduate under the foundation high school program without earning an endorsement.
- (b-1) The State Board of Education by rule shall require that the curriculum requirements for the foundation high school program under Subsection (a) include a requirement that students successfully complete:
 - (1) four credits in English language arts under Section [28.002\(a\)\(1\)\(A\)](#), including one credit in English I, one credit in English II, one credit in English III, and one credit in an advanced English course authorized under Subsection (b-2);
 - (2) three credits in mathematics under Section [28.002\(a\)\(1\)\(B\)](#), including one credit in Algebra I, one credit in geometry, and one credit in any advanced mathematics course authorized under Subsection (b-2);
 - (3) three credits in science under Section [28.002\(a\)\(1\)\(C\)](#), including one credit in biology, one credit in any advanced science course authorized under Subsection (b-2), and one credit in integrated physics and chemistry or in an additional advanced science course authorized under Subsection (b-2);
 - (4) three credits in social studies under Section [28.002\(a\)\(1\)\(D\)](#), including one credit in United States history, at least one-half credit in government and at least one-half credit in economics or personal financial literacy & economics, and one credit in world geography or world history;
 - (5) except as provided under Subsections (b-12), (b-13), and (b-14), two credits in the same language in a language other than English under Section [28.002\(a\)\(2\)\(A\)](#);
 - (6) five elective credits;
 - (7) one credit in fine arts under Section [28.002\(a\)\(2\)\(D\)](#); and

- (8) except as provided by Subsection (b-11), one credit in physical education under Section [28.002\(a\)\(2\)\(C\)](#).
- (b-2) In adopting rules under Subsection (b-1), the State Board of Education shall:
- (1) provide for a student to comply with the curriculum requirements for an advanced English course under Subsection (b-1)(1), for an advanced mathematics course under Subsection (b-1)(2), and for any advanced science course under Subsection (b-1)(3) by successfully completing a course in the appropriate content area that has been approved as an advanced course by board rule or that is offered as an advanced course for credit without board approval as provided by Section [28.002\(g-1\)](#); and
 - (2) allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under Subsection (b-1)(2) or the third and fourth science credits under Subsection (b-1)(3) by successfully completing an advanced career and technical course designated by the State Board of Education as containing substantively similar and rigorous academic content.
- (b-3) In adopting rules for purposes of Subsection (b-2), the State Board of Education must approve a variety of advanced English, mathematics, and science courses that may be taken to comply with the foundation high school program requirements, provided that each approved course prepares students to enter the workforce successfully or postsecondary education without remediation.
- (b-4) A school district may offer the curriculum described in Subsections (b-1)(1) through (4) in an applied manner. Courses delivered in an applied manner must cover the essential knowledge and skills, and the student shall be administered the applicable end-of-course assessment instrument as provided by Sections [39.023\(c\)](#) and [39.025](#).
- (b-5) A school district may offer a mathematics or science course to be taken by a student after completion of Algebra II and physics. A course approved under this subsection must be endorsed by an institution of higher education as a course for which the institution would award course credit or as a prerequisite for a course for which the institution would award course credit.
- (b-6) A school district may allow a student to enroll concurrently in Algebra I and geometry.
- (b-7) The State Board of Education, in coordination with the Texas Higher Education Coordinating Board, shall adopt rules to ensure that a student may comply with the curriculum requirements under the foundation high school program or for an endorsement under Subsection (c-1) by successfully completing appropriate courses in the core curriculum of an institution of higher education under Section [61.822](#). Notwithstanding Subsection (b-15) or (c) of this section, Section [39.025](#), or any other provision of this code and notwithstanding any school district policy, a student who has completed the core curriculum of an institution of higher education under Section [61.822](#), as certified by the institution in accordance with commissioner rule, is considered to have earned a distinguished level of achievement under the foundation high school program and is entitled to receive a high school diploma from the appropriate high school as that high school is determined in accordance with commissioner rule. A student who is considered to have earned a distinguished level of achievement under the foundation high school program under this subsection may apply for admission to an institution of higher education for the first semester or other academic term after the semester or other academic term in which the student completes the core curriculum.
- (b-8) Repealed by Acts 2013, 83rd Leg., R.S., Ch. 211, Sec. 78(b)(3), eff. September 1, 2014.
- (b-9) A school district, with the approval of the commissioner, may allow a student to satisfy the fine arts credit required under Subsection (b-1)(7) by participating in a community-based fine arts program not provided by the school district in which the student is enrolled. The fine arts program must provide instruction in the

essential knowledge and skills identified for fine arts by the State Board of Education under Section [28.002](#)(c). The fine arts program may be provided on or off a school campus and outside the regular school day.

- (b-10) A school district, with the approval of the commissioner, may allow a student to comply with the curriculum requirements for the physical education credit required under Subsection (b-1)(8) by participating in a private or commercially sponsored physical activity program provided on or off a school campus and outside the regular school day.
- (b-11) In adopting rules under Subsection (b-1), the State Board of Education shall allow a student who is unable to participate in physical activity due to disability or illness to substitute one credit in English language arts, mathematics, science, or social studies, one credit in a course that is offered for credit as provided by Section [28.002](#)(g-1), or one academic elective credit for the physical education credit required under Subsection (b-1)(8). A credit allowed to be substituted under this subsection may not also be used by the student to satisfy a graduation requirement other than completion of the physical education credit. The rules must provide that the determination regarding a student's ability to participate in physical activity will be made by:
 - (1) if the student receives special education services under Subchapter [A](#), Chapter [29](#), the student's admission, review, and dismissal committee;
 - (2) if the student does not receive special education services under Subchapter [A](#), Chapter [29](#), but is covered by Section 504, Rehabilitation Act of 1973 (29 U.S.C. Section 794), the committee established for the student under that Act; or
 - (3) if each of the committees described by Subdivisions (1) and (2) is inapplicable, a committee established by the school district of persons with appropriate knowledge regarding the student.
- (b-12) In adopting rules under Subsection (b-1), the State Board of Education shall adopt criteria to allow a student to comply with the curriculum requirements for the two credits in a language other than English required under Subsection (b-1)(5) by substituting two credits in computer programming languages, including computer coding.
- (b-13) In adopting rules under Subsection (b-1), the State Board of Education shall allow a student to substitute credit in another appropriate course for the second credit in the same language in a language other than English otherwise required by Subsection (b-1)(5) if the student, in completing the first credit required under Subsection (b-1)(5), demonstrates that the student is unlikely to be able to complete the second credit. The board rules must establish:
 - (1) the standards and, as applicable, the appropriate school personnel for making a determination under this subsection; and
 - (2) appropriate substitute courses for purposes of this subsection.
- (b-14) In adopting rules under Subsection (b-1), the State Board of Education shall allow a student who, due to disability, is unable to complete two courses in the same language in a language other than English, as provided under Subsection (b-1)(5), to substitute for those credits two credits in English language arts, mathematics, science, or social studies or two credits in career and technology education, technology applications, or other academic electives. A credit allowed to be substituted under this subsection may not also be used by the student to satisfy a graduation credit requirement other than credit for completion of a language other than English. The rules must provide that the determination regarding a student's ability to participate in language-other-than-English courses will be made by:
 - (1) if the student receives special education services under Subchapter [A](#), Chapter [29](#), the student's admission, review, and dismissal committee; or

- (2) if the student does not receive special education services under Subchapter [A](#), Chapter [29](#), but is covered by Section 504, Rehabilitation Act of 1973 (29 U.S.C. Section 794), the committee established for the student under that Act.
- (b-15) A student may earn a distinguished level of achievement under the foundation high school program by successfully completing:
 - (1) four credits in mathematics, which must include Algebra II and the courses described by Subsection (b-1)(2);
 - (2) four credits in science, which must include the courses described by Subsection (b-1)(3);
 - (3) the remaining curriculum requirements under Subsection (b-1); and
 - (4) the curriculum requirements for at least one endorsement under Subsection (c-1).
- (b-16) A student may satisfy an elective credit required under Subsection (b-1)(6) with a credit earned to satisfy the additional curriculum requirements for the distinguished level of achievement under the foundation high school program or an endorsement under Subsection (c-1). This subsection may apply to more than one elective credit.
- (b-17) The State Board of Education shall adopt rules to ensure that a student may comply with the curriculum requirements under Subsection (b-1)(6) by successfully completing an advanced career and technical course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.
- (b-18) In adopting rules under Subsection (b-1), the State Board of Education shall allow a student to comply with the curriculum requirements under Subsection (b-1) by successfully completing a dual credit course.
- (b-19) In adopting rules under Subsection (b-1), the State Board of Education shall adopt criteria to allow a student to comply with curriculum requirements for the world geography or world history credit under Subsection (b-1)(4) by successfully completing a combined world history and world geography course developed by the State Board of Education.
- (b-20) The State Board of Education shall adopt rules to include the instruction developed under Section [28.012](#) in one or more courses in the required curriculum for students in grade levels 9 through 12.
- (b-21) In adopting rules under Subsection (b-1), the State Board of Education shall adopt criteria to allow a student to comply with the curriculum requirement for one credit under Subsection (b-1)(5) by successfully completing at an elementary school either a dual language immersion program under Section [28.0051](#) or a course in American Sign Language.
- (b-22) In adopting rules under Subsection (b-1), the State Board of Education shall ensure that a personal financial literacy & economics course taken to comply with the curriculum requirement under Subsection (b-1)(4) allocates:
 - (1) two-thirds of instruction time to instruction in personal financial literacy; and
 - (2) one-third of instruction time to instruction in economics.
- (b-23) The agency shall:
 - (1) develop a list of free, open-source, and publicly available curricula that may be used by a school district to provide a personal financial literacy & economics course that satisfies the curriculum requirement under Subsection (b-1)(4); and

- (2) seek, accept, and spend any federal or private grant funds and gifts that are available for the purpose of providing a personal financial literacy & economics course as part of the foundation high school program.
- (c) A person may receive a diploma if the person is eligible for a diploma under Section [28.0251](#). In other cases, a student may graduate and receive a diploma only if:
- (1) the student successfully completes the curriculum requirements identified by the State Board of Education under Subsection (a) and complies with Sections [28.0256](#) and [39.025](#); or
 - (2) the student successfully completes an individualized education program developed under Section [29.005](#).
- (c-1) A student may earn an endorsement on the student's transcript by successfully completing curriculum requirements for that endorsement adopted by the State Board of Education by rule. The State Board of Education by rule shall provide students with multiple options for earning each endorsement, including, to the greatest extent possible, coherent sequences of courses. The State Board of Education by rule must permit a student to enroll in courses under more than one endorsement curriculum before the student's junior year. An endorsement under this subsection may be earned in any of the following categories:
- (1) science, technology, engineering, and mathematics (STEM), which includes courses directly related to science, including environmental science, technology, including computer science, cybersecurity, and computer coding, engineering, and advanced mathematics;
 - (2) business and industry, which includes courses directly related to database management, information technology, communications, accounting, finance, marketing, graphic design, architecture, construction, welding, logistics, automotive technology, agricultural science, and heating, ventilation, and air conditioning;
 - (3) public services, which includes courses directly related to health sciences and occupations, mental health, education and training, law enforcement, and culinary arts and hospitality;
 - (4) arts and humanities, which includes courses directly related to political science, world languages, cultural studies, English literature, history, and fine arts; and
 - (5) multidisciplinary studies, which allows a student to:
 - (A) select courses from the curriculum of each endorsement area described by Subdivisions (1) through (4); and
 - (B) earn credits in a variety of advanced courses from multiple content areas sufficient to complete the distinguished level of achievement under the foundation high school program.
- (c-2) In adopting rules under Subsection (c-1), the State Board of Education shall:
- (1) require a student in order to earn any endorsement to successfully complete:
 - (A) four credits in mathematics, which must include:
 - (i) the courses described by Subsection (b-1)(2); and
 - (ii) an additional advanced mathematics course authorized under Subsection (b-2) or an advanced career and technology course designated by the State Board of Education;
 - (B) four credits in science, which must include:

- (i) the courses described by Subsection (b-1)(3); and
 - (ii) an additional advanced science course authorized under Subsection (b-2) or an advanced career and technology course designated by the State Board of Education; and
- (C) two elective credits in addition to the elective credits required under Subsection (b-1)(6); and
- (2) develop additional curriculum requirements for each endorsement with the direct participation of educators and business, labor, and industry representatives, and shall require each school district to report to the agency the categories of endorsements under Subsection (c-1) for which the district offers all courses for curriculum requirements, as determined by board rule.
- (c-3) In adopting rules under Subsection (c-1), the State Board of Education shall adopt criteria to allow a student participating in the arts and humanities endorsement under Subsection (c-1)(4), with the written permission of the student's parent or a person standing in parental relation to the student, to comply with the curriculum requirements for science required under Subsection (c-2)(1)(B)(ii) by substituting for an advanced course requirement a course related to that endorsement.
- (c-4) Each school district must make available to high school students courses that allow a student to complete the curriculum requirements for at least one endorsement under Subsection (c-1). A school district that offers only one endorsement curriculum must offer the multidisciplinary studies endorsement curriculum.
- (c-5) A student may earn a performance acknowledgment on the student's transcript by satisfying the requirements for that acknowledgment adopted by the State Board of Education by rule. An acknowledgment under this subsection may be earned:
 - (1) for outstanding performance:
 - (A) in a dual credit course;
 - (B) in bilingualism and biliteracy;
 - (C) on a college advanced placement test or international baccalaureate examination;
 - (D) on an established, valid, reliable, and nationally norm-referenced preliminary college preparation assessment instrument used to measure a student's progress toward readiness for college and the workplace; or
 - (E) on an established, valid, reliable, and nationally norm-referenced assessment instrument used by colleges and universities as part of their undergraduate admissions process; or
 - (2) for earning a state recognized or nationally or internationally recognized business or industry certification or license.
- (c-6) Notwithstanding Subsection (c), a person may receive a diploma if the person is eligible for a diploma under Section [28.0258](#).
- (c-7) Subject to Subsection (c-8), a student who is enrolled in a special education program under Subchapter [A](#), Chapter [29](#), may earn an endorsement on the student's transcript by:
 - (1) successfully completing, with or without modification of the curriculum:
 - (A) the curriculum requirements identified by the State Board of Education under Subsection (a); and

- (B) the additional endorsement curriculum requirements prescribed by the State Board of Education under Subsection (c-2); and
- (2) successfully completing all curriculum requirements for that endorsement adopted by the State Board of Education:
 - (A) without modification of the curriculum; or
 - (B) with modification of the curriculum, provided that the curriculum, as modified, is sufficiently rigorous as determined by the student's admission, review, and dismissal committee.
- (c-8) For purposes of Subsection (c-7), the admission, review, and dismissal committee of a student in a special education program under Subchapter [A](#), Chapter [29](#), shall determine whether the student is required to achieve satisfactory performance on an end-of-course assessment instrument to earn an endorsement on the student's transcript.
- (c-10) In adopting rules under Subsection (c-1), the State Board of Education shall adopt or select five technology applications courses on cybersecurity to be included in a cybersecurity pathway for the science, technology, engineering, and mathematics endorsement.
- (d) A school district may issue a certificate of coursework completion to a student who successfully completes the curriculum requirements identified by the State Board of Education under Subsection (a) but who fails to comply with Section [39.025](#). A school district may allow a student who receives a certificate to participate in a graduation ceremony with students receiving high school diplomas.
- (e) Each school district shall report the academic achievement record of students who have completed the foundation high school program on transcript forms adopted by the State Board of Education. The transcript forms adopted by the board must be designed to clearly identify whether a student received a diploma or a certificate of coursework completion.
- (e-1) A school district shall clearly indicate a distinguished level of achievement under the foundation high school program as described by Subsection (b-15), an endorsement described by Subsection (c-1), and a performance acknowledgment described by Subsection (c-5) on the transcript of a student who satisfies the applicable requirements. The State Board of Education shall adopt rules as necessary to administer this subsection.
- (e-2) At the end of each school year, each school district shall report through the Public Education Information Management System (PEIMS) the number of district students who, during that school year, were:
 - (1) enrolled in the foundation high school program;
 - (2) pursuing the distinguished level of achievement under the foundation high school program as provided by Subsection (b-15); and
 - (3) enrolled in a program to earn an endorsement described by Subsection (c-1).
- (e-3) Information reported under Subsection (e-2) must be disaggregated by all student groups served by the district, including categories of race, ethnicity, socioeconomic status, sex, and populations served by special programs, including students in special education programs under Subchapter [A](#), Chapter [29](#).
- (f) A school district shall issue a certificate of attendance to a student who receives special education services under Subchapter [A](#), Chapter [29](#), and who has completed four years of high school but has not completed the student's individualized education program. A school district shall allow a student who receives a certificate to participate in a graduation ceremony with students receiving high school diplomas. A student

may participate in only one graduation ceremony under this subsection. This subsection does not preclude a student from receiving a diploma under Subsection (c)(2).

- (g) Repealed by Acts 2013, 83rd Leg., R.S., Ch. 211, Sec. 78(b)(3), eff. September 1, 2014.
- (h) Expired.
- (i) If an 11th or 12th grade student who is homeless or in the conservatorship of the Department of Family and Protective Services transfers to a different school district and the student is ineligible to graduate from the district to which the student transfers, the district from which the student transferred shall award a diploma at the student's request, if the student meets the graduation requirements of the district from which the student transferred.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 28. COURSES OF STUDY; ADVANCEMENT
SUBCHAPTER C. ADVANCED PLACEMENT INCENTIVES

TEC, §28.053. TYPES OF AWARDS.

- (a) A school participating in the program may be awarded:
 - (1) a one-time \$3,000 equipment grant for providing a college advanced placement course or international baccalaureate course to be paid to a school based on need as determined by the commissioner; and
 - (2) \$100 for each student who scores a three or better on a college advanced placement test or four or better on an international baccalaureate examination.
- (b) Funds awarded under Subsection (a) shall be used in the manner determined by the campus team established, by the principal, under Subsection (c).
- (c) The principal of each school participating in the program shall convene, at least annually, a team composed of not more than five members, with not fewer than three teachers, to include at least one teacher participating in the program and at least one teacher who teaches students in preparation for their participation in the program, for the purpose of determining the use of funds awarded under Subsection (a). Nothing in this section limits the authority of the team to direct expenditure of funds awarded under Subsection (a)(2) for awards to individual teachers participating in the program.
- (d) A teacher participating in the program may be awarded:
 - (1) subsidized teacher training, not to exceed \$450 for each teacher, for a college advanced placement course or an international baccalaureate course;
 - (2) a one-time award of \$250 for teaching a college advanced placement course or an International baccalaureate course for the first time; and
 - (3) a share of the teacher bonus pool, which shall be distributed by the teacher's school in shares proportional to the number of courses taught.
- (e) To be eligible for an award under Subsection (d), a teacher must teach a college advanced placement course or an international baccalaureate course.
- (f) Fifty dollars may be deposited in the teacher bonus pool for each student enrolled in the school that scores a three or better on a college advanced placement test or four or better on an international baccalaureate examination.
- (g) A student receiving a score of three or better on a college advanced placement test or four or better on an international baccalaureate examination may receive reimbursement, not to exceed \$65, for the testing fee. The reimbursement shall be reduced by the amount of any subsidy

awarded by the college board or the International Baccalaureate Organization or under Section [28.054](#).

- (h) The commissioner may enter into agreements with the college board and the International Baccalaureate Organization to pay for all examinations taken by eligible public school students. An eligible student is a student who:
 - (1) takes a college advanced placement or international baccalaureate course at a public school or who is recommended by the student's principal or teacher to take the test; and
 - (2) demonstrates financial need as determined in accordance with guidelines adopted by the board that are consistent with the definition of financial need adopted by the college board or the International Baccalaureate Organization.
- (i) The commissioner shall analyze and adjust, as needed, the sum of and number of awards to ensure that the purpose of the program is realized.

TEXAS EDUCATION CODE
CHAPTER 28. COURSES OF STUDY; ADVANCEMENT
SUBCHAPTER B. ADVANCEMENT, PLACEMENT, CREDIT, AND
ACADEMIC ACHIEVEMENT RECORD

TEC, §28.0256. FINANCIAL AID APPLICATION REQUIREMENT FOR HIGH SCHOOL GRADUATION.

- (a) Before graduating from high school, each student must complete and submit a free application for federal student aid (FAFSA) or a Texas application for state financial aid (TASFA), except as otherwise provided by Subsection (b).
- (b) A student is not required to comply with Subsection (a) if:
 - (1) the student's parent or other person standing in parental relation submits a signed form indicating that the parent or other person authorizes the student to decline to complete and submit the financial aid application;
 - (2) the student signs and submits the form described by Subdivision (1) on the student's own behalf if the student is 18 years of age or older or the student's disabilities of minority have been removed for general purposes under Chapter [31](#), Family Code; or
 - (3) a school counselor authorizes the student to decline to complete and submit the financial aid application for good cause, as determined by the school counselor.
- (c) A school district or open-enrollment charter school shall adopt a form to be used for purposes of Subsection (b). The form must:
 - (1) be approved by the agency;
 - (2) provide the student or the student's parent or other person standing in parental relation, as applicable, the opportunity to decline to complete and submit a financial aid application, as provided by Subsection (b); and
 - (3) be made available in English, Spanish, and any other language spoken by a majority of the students enrolled in a bilingual education or special language program under Subchapter [B](#), Chapter [29](#), in the district or school.
- (d) If a school counselor notifies a school district or open-enrollment charter school whether a student has complied with this section for purposes of determining whether the student meets high school graduation requirements under Section [28.025](#), the school counselor may only indicate whether the student has complied with this section and may not indicate the manner in which the student complied, except as necessary for the district or school to comply with rules adopted under Subsection (e)(2). A school counselor may not indicate that a student has not complied with this section if the school district or open-enrollment charter school fails to provide the form adopted under Subsection (c) to the student or the student's parent or other person standing in parental relation to the student.
- (e) The commissioner shall adopt rules as necessary to implement this section, including rules to:
 - (1) establish:
 - (A) a timeline for:
 - (i) the distribution to students of the free application for federal student aid or Texas application for state financial aid and the form adopted under Subsection (c); and
 - (ii) the submission of a form under Subsection (b);

- (B) standards regarding the information that a school district or open-enrollment charter school must provide to students regarding:
 - (i) in accordance with Section [33.007](#)(b)(5), instructions for filling out the free application for federal student aid or Texas application for state financial aid; and
 - (ii) the options available to a student under Subsection (b) if the student wishes to decline to complete and submit a financial aid application; and
- (C) the method by which a student must provide to a school district or open-enrollment charter school proof that the student has completed and submitted the free application for federal student aid or Texas application for state financial aid as required by this section;
- (2) require each school district and open-enrollment charter school to report to the agency:
 - (A) the number of students who completed and submitted a financial aid application under Subsection (a); and
 - (B) the number of students who received an exception from complying with Subsection (a) under Subsection (b); and
- (3) ensure compliance with federal law regarding confidentiality of student educational information, including the Family Educational Rights and Privacy Act of 1974 (20 U.S.C. Section 1232g), and any state law relating to the privacy of student information.
- (f) The agency shall establish an advisory committee to assist the agency in adopting rules under Subsection (e) to implement this section and to develop recommendations for that purpose. The advisory committee is composed of:
 - (1) school counselors;
 - (2) school administrators; and
 - (3) stakeholders to represent the needs of interested students.
- (g) Not later than January 1, 2021, the agency shall report the advisory committee's recommendations to the standing committee of each house of the legislature with jurisdiction over public education. Subsection (f) and this subsection expire January 1, 2023.

Added by Acts 2019, 86th Leg., R.S., Ch. 943 (H.B. [3](#)), Sec. 2.015, eff. June 12, 2019.

Amended by:

Acts 2021, 87th Leg., R.S., Ch. 559 (S.B. [369](#)), Sec. 1, eff. June 14, 2021.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 29. EDUCATIONAL PROGRAMS
SUBCHAPTER Z. MISCELLANEOUS PROGRAMS

TEC, §29.906. CHARACTER TRAITS AND PERSONAL SKILLS INSTRUCTION.

- (a) The State Board of Education shall integrate positive character traits and personal skills into the essential knowledge and skills adopted for kindergarten through grade 12, as appropriate.
- (b) The State Board of Education must include the following positive character traits and personal skills:
 - (1) courage;
 - (2) trustworthiness, including honesty, reliability, punctuality, and loyalty;
 - (3) integrity;
 - (4) respect and courtesy;
 - (5) responsibility, including accountability, diligence, perseverance, self-management skills, and self-control;
 - (6) fairness, including justice and freedom from prejudice;
 - (7) caring, including kindness, empathy, compassion, consideration, patience, generosity, charity, and interpersonal skills;
 - (8) good citizenship, including patriotism, concern for the common good and the community, responsible decision-making skills, and respect for authority and the law;
 - (9) school pride; and
 - (10) gratitude.
- (c) Each school district and open-enrollment charter school must adopt a character education program that includes the positive character traits and personal skills listed in Subsection (b). In developing or selecting a character education program under this section, a school district shall consult with a committee selected by the district that consists of:
 - (1) parents of district students;
 - (2) educators; and
 - (3) other members of the community, including community leaders.
- (d) This section does not require or authorize proselytizing or indoctrinating concerning any specific religious or political belief.
- (e) The agency shall:
 - (1) maintain a list of character education programs that school districts have implemented that meet the criteria under Subsection (b);
 - (2) based on data reported by districts, annually designate as a Character Plus School each school that provides a character education program that:

- (A) meets the criteria prescribed by Subsection (b); and
 - (B) is approved by the committee selected under Subsection (c); and
- (3) include in the report required under Section [39.332](#):
 - (A) based on data reported by districts, the impact of character education programs on student discipline and academic achievement; and
 - (B) other reported data relating to character education programs the agency considers appropriate for inclusion.
- (f) The agency may accept money from federal government and private sources to use in assisting school districts in implementing character education programs that meet the criteria prescribed by Subsection (b).
- (g) The State Board of Education may adopt rules as necessary to implement this section.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 29. EDUCATIONAL PROGRAMS
SUBCHAPTER Z. MISCELLANEOUS PROGRAMS

TEC, §29.907. CELEBRATE FREEDOM WEEK.

- (a) To educate students about the sacrifices made for freedom in the founding of this country and the values on which this country was founded, the week in which September 17 falls is designated as Celebrate Freedom Week in public schools. For purposes of this subsection, Sunday is considered the first day of the week.
- (b) The agency, in cooperation with other state agencies who voluntarily participate, may promote Celebrate Freedom Week through a coordinated program. Nothing in this subsection shall give any other state agency the authority to develop a program that provides instruction unless funds are specifically appropriated to that agency for that purpose.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 31. INSTRUCTIONAL MATERIALS
SUBCHAPTER A. GENERAL PROVISIONS

TEC, §31.003. RULES.

The State Board of Education may adopt rules, consistent with this chapter, for the adoption, requisition, distribution, care, use, and disposal of instructional materials.

TEXAS EDUCATION CODE
CHAPTER 31. INSTRUCTIONAL MATERIALS
SUBCHAPTER A. GENERAL PROVISIONS

TEC, §31.022. INSTRUCTIONAL MATERIALS REVIEW AND ADOPTION.

- (a) The State Board of Education shall adopt a review and adoption cycle for instructional materials for elementary grade levels, including prekindergarten, and secondary grade levels, for each subject in the required curriculum under Section 28.002. In adopting the cycle, the board:
 - (1) is not required to review and adopt instructional materials for all grade levels in a single year; and
 - (2) shall give priority to instructional materials in the following subjects:
 - (A) foundation curriculum subjects for which the essential knowledge and skills have been substantially revised and for which assessment instruments are required under Subchapter B, Chapter 39, including career and technology courses that satisfy foundation curriculum requirements as provided by Section 28.002(n);
 - (B) foundation curriculum subjects for which the essential knowledge and skills have been substantially revised, including career and technology courses that satisfy foundation curriculum requirements as provided by Section 28.002(n);
 - (C) foundation curriculum subjects not described by Paragraph (A) or (B), including career and technology courses that satisfy foundation curriculum requirements as provided by Section 28.002(n); and
 - (D) enrichment curriculum subjects.
- (b) The board shall organize the cycle for subjects in the foundation curriculum so that not more than one-fourth of the instructional materials for subjects in the foundation curriculum are reviewed each biennium. The board shall adopt rules to provide for a full and complete investigation of instructional materials for each subject in the foundation curriculum every eight years. The adoption of instructional materials for a subject in the foundation curriculum may be extended beyond the eight-year period only if the content of instructional materials for a subject is sufficiently current.
- (c) The board shall adopt rules to provide for a full and complete investigation of instructional materials for each subject in the enrichment curriculum on a cycle the board considers appropriate.
- (d) At least 12 months before the beginning of the school year for which instructional materials for a particular subject and grade level will be adopted under the review and adoption cycle, the board shall publish notice of the review and adoption cycle for those instructional materials. A request for production must allow submission of open education resource instructional materials that are available for use by the state without charge on the same basis as instructional materials offered for sale.
- (d-1) A notice published under Subsection (d) must state that a publisher of adopted instructional materials for a grade level other than prekindergarten must submit an electronic sample of the instructional materials as required by Sections 31.027(a) and (b) and may not submit a print sample copy.
- (e) The board shall designate a request for production of instructional materials in a subject area and grade level by the school year in which the instructional materials are intended to be made available in classrooms and not by the school year in which the board makes the request for production.
- (f) The board shall amend any request for production issued for the purchase of instructional materials to conform to the instructional materials funding levels provided by the General Appropriations Act for the year of implementation.
- (g) In determining the disbursement of money to the available school fund and the amount of that disbursement that will be used, in accordance with Section 43.001(d), to fund the instructional materials and technology

TEXAS EDUCATION CODE
CHAPTER 31. INSTRUCTIONAL MATERIALS
SUBCHAPTER A. GENERAL PROVISIONS

allotment under Section [31.0211](#), the board must consider the cost of all district technology requirements, as estimated by the commissioner under Section [31.0211\(d\)](#), and instructional materials for that state fiscal biennium.

- (h) The board shall include information regarding open education resource instructional materials during the adoption cycle, including any cost savings associated with the adoption of open education resource instructional materials.
- (i) During any state fiscal biennium beginning on or after September 1, 2023, the total projected cost of instructional materials under requests for production issued by the board may not exceed 75 percent of the total amount used to fund the instructional materials and technology allotment under Section [31.0211](#) for that biennium.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 31. INSTRUCTIONAL MATERIALS
SUBCHAPTER B. STATE FUNDING, ADOPTION, AND PURCHASE

TEC, §31.023. INSTRUCTIONAL MATERIAL LIST

- (a) For each subject and grade level, the State Board of Education shall adopt a list of instructional materials. The list includes each instructional material submitted for the subject and grade level that meets applicable physical specifications adopted by the State Board of Education and contains material covering at least half of the elements of the essential knowledge and skills of the subject and grade level in the student version of the instructional material, as well as in the teacher version of the instructional material, as determined by the State Board of Education under Section [28.002](#) and adopted under Section [31.024](#).
- (a-1) The State Board of Education shall determine the percentage of the elements of the essential knowledge and skills of the subject and grade level covered by each instructional material submitted. The board's determination under this subsection is final.
- (b) Each instructional material on the list must be:
 - (1) free from factual errors;
 - (2) suitable for the subject and grade level for which the instructional material was submitted; and
 - (3) reviewed by academic experts in the subject and grade level for which the instructional material was submitted.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 31. INSTRUCTIONAL MATERIALS
SUBCHAPTER B. STATE FUNDING, ADOPTION, AND PURCHASE

TEC, §31.024. ADOPTION BY STATE BOARD OF EDUCATION.

- (a) By majority vote, the State Board of Education shall:
- (1) place each submitted instructional material on the list adopted under Section [31.023](#);
or
 - (2) reject instructional material submitted for placement on that list.
- (b) Not later than December 1 of the year preceding the school year for which the instructional materials for a particular subject and grade level will be purchased under the cycle adopted by the board under Section [31.022](#), the board shall provide the list of adopted instructional materials to each school district.

TEXAS EDUCATION CODE
CHAPTER 33. SERVICE PROGRAMS AND EXTRACURRICULAR ACTIVITIES
SUBCHAPTER D. EXTRACURRICULAR ACTIVITIES

TEC, §33.081. EXTRACURRICULAR ACTIVITIES.

- (a) The State Board of Education by rule shall limit participation in and practice for extracurricular activities during the school day and the school week. The rules must, to the extent possible, preserve the school day for academic activities without interruption for extracurricular activities. In scheduling those activities and practices, a school district must comply with the rules of the board.
- (b) A student enrolled in a school district in this state or who participates in an extracurricular activity or a University Interscholastic League competition is subject to school district policy and University Interscholastic League rules regarding participation only when the student is under the direct supervision of an employee of the school or district in which the student is enrolled or at any other time specified by resolution of the board of trustees of the district.
- (c) A student who is enrolled in a school district in this state or who participates in a University Interscholastic League competition shall be suspended from participation in any extracurricular activity sponsored or sanctioned by the school district or the University Interscholastic League after a grade evaluation period in which the student received a grade lower than the equivalent of 70 on a scale of 100 in any academic class other than a course described by Subsection (d-1). A suspension continues for at least three school weeks and is not removed during the school year until the conditions of Subsection (d) are met. A suspension does not last beyond the end of a school year. For purposes of this subsection, "grade evaluation period" means:
 - (1) the six-week grade reporting period; or
 - (2) the first six weeks of a semester and each grade reporting period thereafter, in the case of a district with a grade reporting period longer than six weeks.
- (d) Until the suspension is removed under this subsection or the school year ends, a school district shall review the grades of a student suspended under Subsection (c) at the end of each three-week period following the date on which the suspension began. At the time of a review, the suspension is removed if the student's grade in each class, other than a course described by Subsection (d-1), is equal to or greater than the equivalent of 70 on a scale of 100. The principal and each of the student's teachers shall make the determination concerning the student's grades.
- (d-1) Subsections (c) and (d) do not apply to an advanced placement or international baccalaureate course, or to an honors or dual credit course in the subject areas of English language arts, mathematics, science, social studies, economics, or a language other than English. The agency

shall review on a biennial basis courses described by this subsection to determine if other courses should be excluded from the requirement that a student be suspended from participation in an extracurricular activity under Subsection (c). Not later than January 1 of each odd-numbered year, the agency shall report the findings under this subsection to the legislature.

- (e) Suspension of a student with a disability that significantly interferes with the student's ability to meet regular academic standards must be based on the student's failure to meet the requirements of the student's individualized education program. The determination of whether a disability significantly interferes with a student's ability to meet regular academic standards must be made by the student's admission, review, and dismissal committee. For purposes of this subsection, "student with a disability" means a student who is eligible for a district's special education program under Section [29.003\(b\)](#).
- (e-1) A student who is enrolled in a school district in this state or who participates in a University Interscholastic League competition shall be prohibited from participation in any future extracurricular activity sponsored or sanctioned by the school district or the University Interscholastic League if the state executive committee of the league determines that the student intentionally, knowingly, or recklessly causes bodily injury to a person serving as referee, judge, or other official of an extracurricular activity in retaliation for or as a result of the person's actions taken in performing the duties of a referee, judge, or other official of the extracurricular activity.
- (e-2) A student prohibited from participation in an extracurricular activity under Subsection (e-1) may submit to the University Interscholastic League a request that the student be permitted to participate in future extracurricular activities sponsored or sanctioned by the University Interscholastic League if:
 - (1) the request is submitted at least:
 - (A) one year after the date the student engaged in the conduct that resulted in the prohibition under Subsection (e-1) if the student was enrolled in eighth grade or below at the time of the conduct; or
 - (B) two years after the date the student engaged in the conduct that resulted in the prohibition under Subsection (e-1) if the student was enrolled in ninth grade or above at the time of the conduct;
 - (2) the student:
 - (A) completed a course in anger management since engaging in the conduct that resulted in the prohibition under Subsection (e-1);

- (B) completed any other course, activity, or action required by the school district in which the student is enrolled as a result of the conduct that resulted in the prohibition under Subsection (e-1); and
 - (C) demonstrates, to the satisfaction of the school district and the University Interscholastic League, that the student has been rehabilitated and is unlikely to again engage in the conduct described by Subsection (e-1); and
- (3) a previous request submitted by the student under this section has not been denied during the school year in which the request is submitted.
- (e-3) When determining whether to grant a request under Subsection (e-2), the University Interscholastic League:
 - (1) shall take into account the severity of the conduct that resulted in the prohibition under Subsection (e-1); and
 - (2) may set conditions for the student's future participation in extracurricular activities.
- (e-4) The University Interscholastic League may prohibit a student from participating in any future extracurricular activity sponsored or sanctioned by the University Interscholastic League if the student violates a condition set by the University Interscholastic League under Subsection (e-3)(2).
- (f) Except for a student prohibited from participation under Subsection (e-1), a student suspended under this section may practice or rehearse with other students for an extracurricular activity but may not participate in a competition or other public performance.
- (g) An appeal to the commissioner is not a contested case under Chapter 2001, Government Code, if the issues presented relate to a student's eligibility to participate in extracurricular activities, including issues related to the student's grades, the school district's grading policy as applied to the student's eligibility, or the student's eligibility based on conduct described by Subsection (e-1). The commissioner may delegate the matter for decision to a person the commissioner designates. The decision of the commissioner or the commissioner's designee in a matter governed by this subsection may not be appealed except on the grounds that the decision is arbitrary or capricious. Evidence may not be introduced on appeal other than the record of the evidence before the commissioner.
- (h) A request made under Subsection (e-2) is not a contested case subject to Chapter 2001, Government Code.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE G. SAFE SCHOOLS
CHAPTER 38. HEALTH AND SAFETY
SUBCHAPTER A. GENERAL PROVISIONS

TEC, §38.003. SCREENING AND TREATMENT FOR DYSLEXIA AND RELATED DISORDERS.

- (a) Students enrolling in public schools in this state shall be screened or tested, as appropriate, for dyslexia and related disorders at appropriate times in accordance with a program approved by the State Board of Education. The program must include screening at the end of the school year of each student in kindergarten and each student in the first grade.
- (b) In accordance with the program approved by the State Board of Education, the board of trustees of each school district shall provide for the treatment of any student determined to have dyslexia or a related disorder.
- (b-1) Unless otherwise provided by law, a student determined to have dyslexia during screening or testing under Subsection (a) or accommodated because of dyslexia may not be rescreened or retested for dyslexia for the purpose of reassessing the student's need for accommodations until the district reevaluates the information obtained from previous screening or testing of the student.
- (c) Subject to Subsection (c-1), the State Board of Education shall adopt any rules and standards necessary to administer this section.
- (c-1) The agency by rule shall develop procedures designed to allow the agency to:
 - (1) effectively audit and monitor and periodically conduct site visits of all school districts to ensure that districts are complying with this section, including the program approved by the State Board of Education under this section;
 - (2) identify any problems school districts experience in complying with this section, including the program approved by the State Board of Education under this section; and
 - (3) develop reasonable and appropriate remedial strategies to address school district noncompliance and ensure the purposes of this section are accomplished.
- (d) In this section:
 - (1) "Dyslexia" means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell, despite conventional instruction, adequate intelligence, and sociocultural opportunity.
 - (2) "Related disorders" includes disorders similar to or related to dyslexia, such as developmental auditory imperception, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE H. PUBLIC SCHOOL SYSTEM ACCOUNTABILITY
CHAPTER 39. PUBLIC SCHOOL SYSTEM ACCOUNTABILITY
SUBCHAPTER B. ASSESSMENT OF ACADEMIC SKILLS

TEC, §39.033. VOLUNTARY ASSESSMENT OF PRIVATE SCHOOL STUDENTS.

- (a) Under an agreement with the agency, a private school may administer an assessment instrument adopted under this subchapter to students at the school.
- (b) An agreement under this section must require the private school to:
 - (1) as determined appropriate by the commissioner, provide to the commissioner the information described by Sections [39.053\(c\)](#) and [39.301\(c\)](#); and
 - (2) maintain confidentiality in compliance with Section [39.030](#).
- (c) A private school must reimburse the agency for the cost of administering an assessment instrument under this section. The State Board of Education shall determine the cost under this section. The per-student cost may not exceed the cost of administering the same assessment to a student enrolled in a public school district.
- (d) In this section, "private school" means a school that:
 - (1) offers a general education to elementary or secondary students; and
 - (2) is not operated by a governmental entity.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE I. SCHOOL FINANCE AND FISCAL MANAGEMENT
CHAPTER 43. PERMANENT SCHOOL FUND AND AVAILABLE SCHOOL FUND
SUBCHAPTER B. TEXAS PERMANENT SCHOOL FUND CORPORATION

TEC, §43.052. CREATION OF CORPORATION.

- (a) The State Board of Education may incorporate the Texas Permanent School Fund Corporation and delegate to the corporation the board's authority to manage and invest:
 - (1) the permanent school fund under Section [43.003](#); and
 - (2) the charter district bond guarantee reserve fund under Section [45.0571](#).
- (b) The State Board of Education shall adopt the initial articles of incorporation for the corporation.
- (c) The corporation is a special-purpose governmental corporation and instrumentality of the state with necessary and implied powers to accomplish its purpose. The corporation is subject to regulation and limitation only as provided by this subchapter.

Added by Acts 2021, 87th Leg., R.S., Ch. 875 (S.B. [1232](#)), Sec. 1.06, eff. September 1, 2021.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE I. SCHOOL FINANCE AND FISCAL MANAGEMENT
CHAPTER 43. PERMANENT SCHOOL FUND AND AVAILABLE SCHOOL FUND
SUBCHAPTER B. TEXAS PERMANENT SCHOOL FUND CORPORATION

TEC, §43.053. BOARD OF DIRECTORS; MEETINGS.

- (a) The board of directors is composed of the following nine members:
 - (1) five members of the State Board of Education, appointed by the board in accordance with board policy;
 - (2) the commissioner of the General Land Office;
 - (3) one member appointed by the commissioner of the General Land Office who has substantial background and expertise in investments and asset management; and
 - (4) two members appointed by the governor, with the advice and consent of the senate, each of whom must have substantial background and expertise in investments and asset management and may not be members of the State Board of Education or the School Land Board.
- (b) The State Board of Education by rule shall establish the terms of members of the board of directors appointed under Subsection (a)(1).
- (c) Members of the board of directors appointed under Subsections (a)(3) and (4) serve staggered six-year terms, with the term of one member expiring on January 1 of each odd-numbered year.
- (d) The initial members described by Subsection (c) shall determine by lot which one of the initial members will serve a term expiring January 1 of the first odd-numbered year following the establishment of the corporation, which one of the initial members will serve a term expiring January 1 of the second odd-numbered year following the establishment of the corporation, and which one of the initial members will serve a term expiring January 1 of the third odd-numbered year following the establishment of the corporation.
- (e) Appointments to the board of directors must be made without regard to the race, color, disability, sex, religion, age, or national origin of the appointees.
- (f) The board of directors shall elect officers of the board in accordance with the corporation's bylaws.
- (g) The board of directors shall meet at least three times per year.

Added by Acts 2021, 87th Leg., R.S., Ch. 875 (S.B. [1232](#)), Sec. 1.06, eff. September 1, 2021.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE I. SCHOOL FINANCE AND FISCAL MANAGEMENT
CHAPTER 43. PERMANENT SCHOOL FUND AND AVAILABLE SCHOOL FUND
SUBCHAPTER A. GENERAL PROVISIONS

TEC, §43.001. COMPOSITION OF PERMANENT SCHOOL FUND AND AVAILABLE SCHOOL FUND.

- (a) Except as provided by Subsection (b), the permanent school fund, which is a perpetual endowment for the public schools of this state, consists of:
- (1) all land appropriated for the public schools by the constitution and laws of this state;
 - (2) all of the unappropriated public domain remaining in this state, including all land recovered by the state by suit or otherwise except pine forest land as described by Section [88.111](#) and property described by Section [12.128](#);
 - (3) all proceeds from the authorized sale of permanent school fund land;
 - (4) all proceeds from the lawful sale of any other properties belonging to the permanent school fund;
 - (5) all investments authorized by Section [43.003](#) of assets belonging to the permanent school fund; and
 - (6) all income from the mineral development of permanent school fund land, including income from mineral development of riverbeds and other submerged land.
- (b) The available school fund, which shall be apportioned annually to each county according to its scholastic population, consists of:
- (1) the distributions to the fund from the permanent school fund as provided by Sections [5\(a\)](#) and (g), Article VII, Texas Constitution;
 - (2) one-fourth of all revenue derived from all state occupation taxes, exclusive of delinquencies and cost of collection;
 - (3) one-fourth of revenue derived from state gasoline and special fuels excise taxes as provided by law; and
 - (4) all other appropriations to the available school fund made by the legislature for public school purposes.
- (c) The term "scholastic population" in Subsection (b) or any other law governing the apportionment, distribution, and transfer of the available school fund means all students of school age enrolled in average daily attendance the preceding school year in the public elementary and high school grades of school districts within or under the jurisdiction of a county of this state.
- (d) Each biennium the State Board of Education shall set aside an amount equal to 50 percent of the distribution for that biennium from the permanent school fund to the available school fund as provided by Sections [5\(a\)](#) and (g), Article VII, Texas Constitution, to be placed, subject to the

General Appropriations Act, in the state instructional materials and technology fund established under Section [31.021](#).

Added by Acts 1995, 74th Leg., ch. 260, Sec. 1, eff. May 30, 1995. Amended by Acts 2003, 78th Leg., ch. 201, Sec. 36, eff. June 10, 2003; Acts 2003, 78th Leg., ch. 328, Sec. 2.

Amended by:

Acts 2011, 82nd Leg., 1st C.S., Ch. 6 (S.B. [6](#)), Sec. 65, eff. July 19, 2011.

Acts 2011, 82nd Leg., 1st C.S., Ch. 6 (S.B. [6](#)), Sec. 66, eff. July 19, 2011.

Acts 2015, 84th Leg., R.S., Ch. 731 (H.B. [1474](#)), Sec. 4, eff. September 1, 2015.

Acts 2017, 85th Leg., R.S., Ch. 581 (S.B. [810](#)), Sec. 34, eff. June 9, 2017.

Acts 2017, 85th Leg., R.S., Ch. 705 (H.B. [3526](#)), Sec. 22, eff. June 12, 2017.

Acts 2019, 86th Leg., R.S., Ch. 461 (H.B. [4611](#)), Sec. 1, eff. January 1, 2020.

Acts 2019, 86th Leg., R.S., Ch. 461 (H.B. [4611](#)), Sec. 2, eff. January 1, 2020.

Acts 2019, 86th Leg., R.S., Ch. 467 (H.B. [4170](#)), Sec. 5.028, eff. September 1, 2019.

Acts 2019, 86th Leg., R.S., Ch. 631 (S.B. [1454](#)), Sec. 12, eff. June 10, 2019.

Acts 2021, 87th Leg., R.S., Ch. 875 (S.B. [1232](#)), Sec. 1.02, eff. September 1, 2021.

TEXAS GOVERNMENT CODE
TITLE 10. GENERAL GOVERNMENT
SUBTITLE A. ADMINISTRATIVE PROCEDURE AND PRACTICE
CHAPTER 2001. ADMINISTRATIVE PROCEDURE
SUBCHAPTER B. RULEMAKING

TGC, §2001.039. AGENCY REVIEW OF EXISTING RULES.

- (a) A state agency shall review and consider for readoption each of its rules in accordance with this section.
- (b) A state agency shall review a rule not later than the fourth anniversary of the date on which the rule takes effect and every four years after that date. The adoption of an amendment to an existing rule does not affect the dates on which the rule must be reviewed except that the effective date of an amendment is considered to be the effective date of the rule if the agency formally conducts a review of the rule in accordance with this section as part of the process of adopting the amendment.
- (c) The state agency shall readopt, readopt with amendments, or repeal a rule as the result of reviewing the rule under this section.
- (d) The procedures of this subchapter relating to the original adoption of a rule apply to the review of a rule and to the resulting repeal, readoption, or readoption with amendments of the rule, except as provided by this subsection. Publishing the Texas Administrative Code citation to a rule under review satisfies the requirements of this subchapter relating to publishing the text of the rule unless the agency readopts the rule with amendments as a result of the review.
- (e) A state agency's review of a rule must include an assessment of whether the reasons for initially adopting the rule continue to exist.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 28. COURSES OF STUDY; ADVANCEMENT
SUBCHAPTER A. ESSENTIAL KNOWLEDGE AND SKILLS; CURRICULUM

TEC, §28.0021. PERSONAL FINANCIAL LITERACY.

- (a) The Texas essential knowledge and skills and, as applicable, Section 28.025 shall include instruction in personal financial literacy, including instruction in methods of paying for college and other postsecondary education and training, in:
 - (1) mathematics instruction in kindergarten through grade eight; and
 - (2) one or more courses offered for high school graduation.
- (b) Each school district and each open-enrollment charter school that offers a high school program shall provide an elective course in personal financial literacy that meets the requirements for a one-half elective credit under Section 28.025, using materials approved by the State Board of Education. The instruction in personal financial literacy must include instruction on completing the application for federal student aid provided by the United States Department of Education. In fulfilling the requirement to provide financial literacy instruction under this section, a school district or open-enrollment charter school may use an existing state, federal, private, or nonprofit program that provides students without charge the instruction described under this section.

TEXAS EDUCATION CODE
TITLE 2. PUBLIC EDUCATION
SUBTITLE F. CURRICULUM, PROGRAMS, AND SERVICES
CHAPTER 28. COURSES OF STUDY; ADVANCEMENT
SUBCHAPTER C. ADVANCED PLACEMENT INCENTIVES

TEC, §28.054. SUBSIDIES FOR COLLEGE ADVANCED PLACEMENT TEST OR INTERNATIONAL BACCALAUREATE EXAMINATION.

- (a) A student is entitled to a subsidy for a fee paid by the student to take a college advanced placement test or an international baccalaureate examination if the student demonstrates financial need. The board shall adopt guidelines for determining financial need consistent with the definition of financial need adopted by the college board or the International Baccalaureate Organization.
- (b) To obtain a subsidy under this section, a student must:
 - (1) pay the fee for each test or examination for which the student seeks a subsidy; and
 - (2) submit to the board through the student's school counselor a written application on a form prescribed by the commissioner demonstrating financial need and the amount of the fee paid by the student for each test or examination.
- (c) On approval by the board, the agency may pay each eligible applicant an equal amount, not to exceed \$25 for each applicant.

MINUTES

STATE BOARD OF EDUCATION

SEPTEMBER 2021

Minutes

State Board of Education

September 3, 2021

STATE BOARD OF EDUCATION
(State Board for Career and Technology Education)

KEVEN ELLIS, Lufkin
Chair of the State Board of Education
District 9

PAM LITTLE, Fairview
Vice Chair of the State Board of
Education
District 12

GEORGINA PÉREZ, El Paso
Secretary of the State Board of
Education
District 1

Board Members

LAWRENCE ALLEN, JR., Houston
District 4

WILL HICKMAN, Houston
District 6

REBECCA BELL-METEREAU, San Marcos
District 5

TOM MAYNARD, Florence
District 10

RUBEN CORTEZ, JR., Brownsville
District 2

SUE MELTON-MALONE, Robinson
District 14

AICHA DAVIS, Dallas
District 13

MARISA PEREZ-DIAZ, Converse
District 3

JAY JOHNSON, Pampa
District 15

MATT ROBINSON, Friendswood
District 7

PATRICIA HARDY, Fort Worth
District 11

AUDREY YOUNG, Apple Springs
District 8

Committees of the State Board of Education

INSTRUCTION

Sue Melton-Malone
Rebecca Bell-Metereau
Pam Little
Georgina Pérez
Audrey Young

SCHOOL FINANCE/PERMANENT SCHOOL FUND

Tom Maynard
Lawrence Allen, Jr.
Keven Ellis
Pat Hardy
Marisa Perez-Diaz

SCHOOL INITIATIVES

Matt Robinson
Ruben Cortez, Jr.
Aicha Davis
Will Hickman
Jay Johnson

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Minutes
State Board of Education
Friday, September 3, 2021

The State Board of Education met at 9:00 a.m. on Friday, September 3, 2021, in the State Board of Education Room, #1-104, of the William B. Travis Building, 1701 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

Present: Keven Ellis, chair; Lawrence A. Allen, Jr (virtual).; Rebecca Bell-Metereau; Ruben Cortez, Jr.; Aicha Davis; Pat Hardy; Will Hickman; Jay Johnson; Pam Little vice-chair; Tom Maynard; Sue Melton-Malone; Georgina C. Pérez, secretary; Marisa B. Perez-Diaz; Matt Robinson; Audrey Young

Student Performance

Student performances were provided virtually by the Midway Choral Department.

Invocation

Pledge of Allegiance

Roll Call

Approval of Minutes

State Board of Education, June 25, 2021

MOTION AND VOTE: *The State Board of Education unanimously approved the Minutes of the June 25, 2021, meeting of the State Board of Education, as printed.*

1. Resolutions

Heroes for Children Award

The State Board of Education, by unanimous consent, adopted a resolution honoring Stephen Hambric, Mayra Lozano, Isaiah Riebeling, Terence Narcisse, Derrick Townsend, Beki Perkins, Eileen Crues, Harvey Oyler, Anna Marie Hornsby, Terri Romere, Randy Cutshall, Jon Boyd, Opal Lee, Mary Ann Jack, and Amy Punchard as the 2021 Heroes for Children Award recipients.

(ATTACHMENT 1, page 9)

Public Testimony

Public Testimony was provided by the following individuals:

NAME: Perla Hopkins
AFFILIATION: Self

NAME: Paul Gauthier
AFFILIATION: Self

NAME: Emily Parent
AFFILIATION: Self

NAME: Anh-thu Nguyen
AFFILIATION: Self

NAME: Brad Lander
AFFILIATION: Self

NAME: Cassie Newsom
AFFILIATION: Self

NAME: Bradley Sachs
AFFILIATION: Self

NAME: Michael Wexler
AFFILIATION: Self

NAME: Daniella Stromberg
AFFILIATION: Self

NAME: Jeffrey Aronowitz
AFFILIATION: Self

NAME: Nicole Krishtul
AFFILIATION: Self

NAME: Tommie Smith
AFFILIATION: Self

Any agenda item may be placed on the consent agenda by any State Board of Education committee. The State Board of Education may elect to take separate action on any item on the consent agenda.

By unanimous consent, the State Board of Education approved the following items on the consent agenda.

- (1) **Proposed Repeal of 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter D, Special Education Services and Settings, §89.61, Contracting for Residential Educational Placements for Students with Disabilities, and §89.63, Instructional Arrangements and Settings**
(Second Reading and Final Adoption)
(Board agenda II-106)

The State Board of Education approved for second reading and final adoption the proposed repeal of 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter D, Special Education Services and Settings, §89.61, Contracting for Residential Educational Placements for Students with Disabilities, and §89.63, Instructional Arrangements and Settings and made an affirmative finding that immediate adoption of the proposed repeal of 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter D, Special Education Services and Settings, §89.61, Contracting for Residential Educational Placements for Students with Disabilities, and §89.63, Instructional Arrangements and Settings, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register. (ATTACHMENT 2, page 11)

- (2) **Approval of Updates and Substitutions to Adopted Instructional Materials**
(Board agenda II-115)

The State Board of Education approved the request from the Children's Learning Institute at UT Health Science Center at Houston to update content in its adopted products *CIRCLE Pre-K Curriculum (English)* and *CIRCLE Pre-K Curriculum: Spanish Edition*.

- (3) **Proposed Amendment to 19 TAC Chapter 109, Budgeting, Accounting, and Auditing, Subchapter B, Texas Education Agency Audit Functions, §109.25, State Compensatory Education Program Reporting and Auditing System**
(Second Reading and Final Adoption)
(Board agenda III-115)

The State Board of Education removed this item from the consent agenda.

- (4) **Ratification of the Purchases and Sales of the Investment Portfolio of the Permanent School Fund for the Months of May and June 2021**
(Board agenda III-9)

The State Board of Education ratified the purchases and sales for the months of May and June 2021, in the amounts of \$1,112,312,733 and \$1,231,656,279, respectively.
(ATTACHMENT 3, page 17)

(5) Report on Permanent School Fund Liquid Account and Ratification of Purchases and Sales for the Months of May and June 2021

(Board agenda III-10)

The State Board of Education ratified the purchases and sales of the PSF Liquid Account for the period May 1, 2021, through June 30, 2021, in the amounts of \$156,071,850 and \$44,518,526, respectively and, because the Liquid Account transition is almost complete, approved that Permanent School Fund staff be given discretion to prudently move faster to fully invest the Liquid Account. (ATTACHMENT 4, page 19)

(6) Determination as to Whether Transfers May be Made from the Permanent School Fund to the Available School Fund

(Board agenda III-11)

The State Board of Education approved a distribution to the Available School Fund of approximately \$1.731 billion for fiscal year 2022.

(7) Proposed Amendments to the Investment Procedures Manual

(Board agenda III-13)

The State Board of Education approved the amendments to the Investment Procedures Manual as presented by staff.

(8) Recommendation for Reappointment to the Boys Ranch Independent School District Board of Trustees

(Board agenda IV-1)

The State Board of Education approved the reappointment of Mr. James Taylor to serve a two-year term of office from September 3, 2021, to September 3, 2023, on the Boys Ranch ISD Board of Trustees.

(9) Approval of Special Purpose School District Advisory Board Members for Texas Tech University K-12

(Board agenda IV-12)

The State Board of Education approved the appointment of nominees submitted by Dr. Lawrence Schovanec, President, Texas Tech University, to serve a two-year term of office from September 3, 2021, to September 3, 2023, on the TTU K-12 advisory board.

(10) Approval of Special Purpose School District Advisory Board Members for University of Texas at Austin High School

(Board agenda IV-15)

The State Board of Education approved the appointment of nominees submitted by UT Austin High School to serve two-year terms of office from September 3, 2021, to September 3, 2023, on the UT Austin High School advisory board.

COMMITTEE OF THE FULL BOARD

3. **Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training; Subchapter I, Health Science; Subchapter J, Hospitality and Tourism; Subchapter M, Law and Public Service; and Subchapter O, Science, Technology, Engineering, and Mathematics (First Reading and Filing Authorization)**
(Board agenda page I-7)

MOTION AND VOTE: *It was moved by Ms. Little and carried that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.416-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.651 and §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787, as amended and recommended by the Committee of the Full Board.*

(Dr. Robinson was absent for the vote.)

4. **Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §§112.1-112.7, and Subchapter B, Middle School, §§112.25-112.28 (First Reading and Filing Authorization)**
(Board agenda page I-11)

MOTION: *It was moved by Mrs. Little that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021, as amended recommended by the Committee of the Full Board.*

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Dr. Johnson, and carried that the State Board of Education amend §112.28(b)(11)(B) to read:*

“use scientific evidence to describe how human activities ~~over the past 150 years, including the release of greenhouse gases,~~ can influence climate change such as the release of greenhouse gases, deforestation, and urbanization; and”

VOTE: *A vote was taken on the original motion that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted*

2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021, as amended and recommended by the Committee of the Full Board, as amended. The motion carried.

5. Update on Texas Essential Knowledge and Skills (TEKS) Review
(Board agenda page I-54)

The State Board of Education took no action on this item.

COMMITTEE ON INSTRUCTION

6. Proposed Amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders (Second Reading and Final Adoption)
(Board agenda page II-3)

MOTION AND VOTE: *It was moved by Mrs. Melton-Malone, seconded by Mrs. Little, and carried that the State Board of Education approve for second reading and final adoption the proposed amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders; and*

Make an affirmative finding that immediate adoption of the proposed amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register, as amended and recommended by the Committee on Instruction (ATTACHMENT 5, page 21).

7. Report from the Commissioner of Education Regarding Updated Texas Prekindergarten Guidelines Alignment for Adopted Instructional Materials
(Board agenda page II-117)

MOTION AND VOTE: *It was moved by Mrs. Melton-Malone and carried that the State Board of Education require that all publishers make changes listed in the Texas Prekindergarten Guidelines Update Report of Editorial Changes, approve changes and corrections submitted in response to written comments and public testimony, and update the official TPG percentage for instructional materials reviewed for TPG Updates on the Instructional Materials Current Adoption Bulletin, as recommended by the Committee on Instruction.*

COMMITTEE ON SCHOOL FINANCE/PERMANENT SCHOOL FUND

8. Proposed Amendment to 19 TAC Chapter 109, Budgeting, Accounting, and Auditing, Subchapter B, Texas Education Agency Audit Functions, §109.25, State Compensatory Education Program Reporting and Auditing System (Second Reading and Final Adoption)

(Board agenda page III-3)

MOTION AND VOTE: *It was moved by Mr. Maynard and carried that the State Board of Education approve for second reading and final adoption the proposed amendment to 19 TAC Chapter 109, Budgeting, Accounting, and Auditing, Subchapter B, Texas Education Agency Audit Functions, §109.25, State Compensatory Education Program Reporting and Auditing System; and*

Make an affirmative finding that immediate adoption of the proposed amendment to 19 TAC Chapter 109, Budgeting, Accounting, and Auditing, Subchapter B, Texas Education Agency Audit Functions, §109.25, State Compensatory Education Program Reporting and Auditing System, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register, as recommended by the Committee on School Finance/Permanent School Fund (ATTACHMENT 6, page 107).

REGARDING AGENDA ITEMS POSTED FOR DISCUSSION ON COMMITTEE AGENDAS

Committee on Instruction

Mrs. Melton-Malone did not report on the Committee on Instruction.

Committee on School Finance/Permanent School Fund

Mr. Maynard reported that the certificate of formation for the Permanent School Fund Corporation will be an action item at the November 2021 meeting.

Committee on School Initiatives

Dr. Robinson reported that the Texas School Safety Center (TSSC) presented overview of House Bill 690 from the 87th legislative session. Dr. Robinson also reported that the TSSC will help convene an ad hoc committee to be involved in the implementation of the safety training requirements listed in the bill.

REPORTS OF OTHER STATE BOARD OF EDUCATION MEMBERS REGARDING AGENDA ITEMS AND EDUCATIONAL ACTIVITIES AND CONCERNS IN INDIVIDUAL DISTRICTS

Dr. Ellis gave board members an opportunity to provide information regarding agenda items or other relevant information about public education.

The meeting adjourned at 11:25 a.m.

Georgina C. Pérez, Secretary

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RESOLUTION

WHEREAS volunteers provide invaluable support to our Texas public schools through selfless giving of their time, talent, and financial resources; and

WHEREAS the State Board of Education has honored outstanding school volunteers with the Heroes for Children award since 1994; and

WHEREAS Stephen Hambric has been a loyal volunteer over the last 38 years for Socorro Independent School District (ISD) where he served on multiple steering committees, including as committee chairman of the Excellence in Education Scholarship Foundation that awarded over \$508,000 to 40 deserving students; and

WHEREAS Mayra Lozano is an inspiration to the La Joya ISD community for creating a social media forum that provided parents and others with much needed resources during the pandemic, she also volunteered on various advisory committees and served as a liaison between the local school and community; and

WHEREAS Isaiah Riebeling is a firefighter who made a special connection with students served by the Dewitt-Lavaca Special Education Cooperative, whose thoughtfulness showed when he built a picnic table though he had never built one before, to have more space to lunch outside during the pandemic; and whose in-kind and cash donations benefited the children and staff; and

WHEREAS Terence Narcisse is a hero who founded the East Harris County Empowerment Council, a non-profit organization that has grown over the years and has benefitted thousands of school children in Galena Park ISD and surrounding districts by providing scholarships, resources, and opportunities for youth and families to succeed; and

WHEREAS Derrick Townsend is a dedicated mentor who has served elementary to high school students for over 30 years in Austin ISD, and who serves as a leader and role model to his mentees in local groups such as *Dad's Club* and *Men in Education*; and

WHEREAS Beki Perkins works tirelessly to share, encourage, educate, and inspire others to support the staff and students of Klein ISD whose motto is, "every student enters with a promise and exits with a purpose". Their motto became her driving force to get involved in various advisory boards and the Klein Education Foundation; and

WHEREAS Eileen Crues launched the Friendswood ISD Special Education Parent-Teacher Organization in 2013 with a focus on providing resources and supporting parents of children with disabilities, that has, to date, raised \$20,000 by hosting an annual art show that benefited specialized classes for the students; and

WHEREAS Harvey Oyler found fulfillment after his retirement by joining Partners in Education with the Kiwanis Club of Baytown and as chairman, his leadership benefited the students and staff of Alamo Elementary in Goose Creek Consolidated ISD with unparalleled generosity in the form of cash and in-kind donations; and

WHEREAS Anna Marie Hornsby is a visionary leader who, as a founding member and president of the Pleasant Grove ISD Education Foundation, oversaw the foundation's highest fundraising campaign that directly benefited the students and staff with over 150 grants and over \$500,000; and

WHEREAS Terri Romere was instrumental in the creation of the *Raise 'Em Up Foundation* with the mission to provide grants for livestock projects and agriculture programs that promote life skills, personal responsibility, fair play, good sportsmanship, hard work, integrity, leadership, and community service in districts across Travis and Williamson Counties; and

WHEREAS Randy Cutshall volunteers his time and photography talent on Friday nights and weekends as an exceptional photographer for Weatherford ISD capturing special moments for students, families, and staff to enjoy and, most importantly, for the Weatherford parents to download at no cost; and

WHEREAS Jon Boyd is a true leader in promoting civil service and community education in support of Allen ISD students and staff, and through his leadership, the Allen Fire Department was able to efficiently deploy the distribution of vaccines which brought tremendous calm in the community amid the height of the pandemic; and

WHEREAS Opal Lee championed social justice and education for six decades that lead to her tremendous work and success to make Juneteenth a national holiday, and she is often described as the "grandmother of Juneteenth" whose name is in the Fort Worth ISD Hall of Fame; and

WHEREAS Mary Ann Jack is instrumental in securing sponsorship and keeping the finances of the Five Hills Scholarship Program viable, and under her guidance in 2021, the program awarded more than \$110,000 in scholarships and prizes, and nearly \$500,000 has been awarded to deserving students since 2014; and

WHEREAS Amy Punchard believes in the mission of Lubbock-Cooper ISD where every child deserves every opportunity, and in the time she has served as president of the Education Foundation, approximately \$900,000 has been contributed to the district's classrooms; now, therefore, be it

RESOLVED, that the State Board of Education recognizes these outstanding individuals as Heroes for Children and thanks them for their combined 210 years of volunteer service in their local public schools and communities.

WITNESS our signatures this third day of September, two thousand and twenty-one in Austin, Texas.

Keven Ellis, Chair

Georgina C. Pérez, Secretary

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ATTACHMENT 2
Text of Proposed Repeal of 19 TAC

Chapter 89. Adaptations for Special Populations

Subchapter D. Special Education Services and Settings

§89.61. Contracting for Residential Educational Placements for Students with Disabilities.

- ~~(a) Residential placement. A school district may contract for residential placement of a student when the student's admission, review, and dismissal (ARD) committee determines that a residential placement is necessary in order for the student to receive a free appropriate public education (FAPE).~~
- ~~(1) A school district may contract for a residential placement of a student only with either public or private residential facilities which maintain current and valid licensure by the Texas Department of Aging and Disability Services, Texas Department of Family and Protective Services, or Department of State Health Services for the particular disabling condition and age of the student. A school district may contract for an out-of-state residential placement in accordance with the provisions of subsection (c)(3) of this section.~~
- ~~(2) Subject to subsections (b) and (c) of this section, the district may contract with a residential facility to provide some or all of the special education services listed in the contracted student's individualized education program (IEP). If the facility provides any educational services listed in the student's IEP, the facility's education program must be approved by the commissioner of education in accordance with subsection (c) of this section.~~
- ~~(3) A school district which intends to contract for residential placement of a student with a residential facility under this section shall notify the Texas Education Agency (TEA) of its intent to contract for the residential placement through the residential application process described in subsection (b) of this section.~~
- ~~(4) The school district has the following responsibilities when making a residential placement:~~
- ~~(A) Before the school district places a student with a disability in, or refers a student to, a residential facility, the district shall initiate and conduct a meeting of the student's ARD committee to develop an IEP for the student in accordance with 34 Code of Federal Regulations, §§300.320-300.325, state statutes, and commissioner of education rules.~~
- ~~(B) For each student, the services which the school district is unable to provide and which the facility will provide shall be listed in the student's IEP.~~
- ~~(C) For each student, the ARD committee shall establish, in writing, criteria and estimated timelines for the student's return to the school district.~~
- ~~(D) The appropriateness of the facility for each student residentially placed shall be documented in the IEP. General screening by a regional education service center is not sufficient to meet the requirements of this subsection.~~
- ~~(E) The school district shall make an initial and an annual on-site visit to verify that the residential facility can, and will, provide the services listed in the student's IEP which the facility has agreed to provide to the student.~~
- ~~(F) For each student placed in a residential facility (both initial and continuing placements), the school district shall verify, during the initial residential placement ARD committee meeting and each subsequent annual ARD committee meeting, that:~~
- ~~(i) the facility meets minimum standards for health and safety;~~
- ~~(ii) residential placement is needed and is documented in the IEP; and~~
- ~~(iii) the educational program provided at the residential facility is appropriate and the placement is the least restrictive environment for the student.~~

- ~~(G) — The placement of more than one student, in the same residential facility, may be considered in the same on-site visit to a facility; however, the IEP of each student must be individually reviewed and a determination of appropriateness of placement and service must be made for each student.~~
- ~~(H) — When a student who is residentially placed by a school district changes his residence to another Texas school district, and the student continues in the contracted placement, the school district which negotiated the contract shall be responsible for the residential contract for the remainder of the school year.~~
- ~~(b) — Application approval process. Requests for approval of state and federal funding for residentially placed students shall be negotiated on an individual student basis through a residential application submitted by the school district to the TEA.~~
- ~~(1) — A residential application may be submitted for educational purposes only. The residential application shall not be approved if the application indicates that the:~~
- ~~(A) — placement is due primarily to the student's medical problems;~~
- ~~(B) — placement is due primarily to problems in the student's home;~~
- ~~(C) — district does not have a plan, including timelines and criteria, for the student's return to the local school program;~~
- ~~(D) — district did not attempt to implement lesser restrictive placements prior to residential placement (except in emergency situations as documented by the student's ARD committee);~~
- ~~(E) — placement is not cost effective when compared with other alternative placements; and/or~~
- ~~(F) — residential facility provides unfundable/unapprovable services.~~
- ~~(2) — The residential placement, if approved by the TEA, shall be funded as follows:~~
- ~~(A) — the education cost of residential contracts shall be funded with state funds on the same basis as nonpublic day school contract costs according to Texas Education Code, §42.151;~~
- ~~(B) — related services and residential costs for residential contract students shall be funded from a combination of fund sources. After expending any other available funds, the district must expend its local tax share per average daily attendance and 25% of its Individuals with Disabilities Education Act, Part B, (IDEA B) formula tentative entitlement (or an equivalent amount of state and/or local funds) for related services and residential costs. If this is not sufficient to cover all costs of the residential placement, the district through the residential application process may receive additional IDEA B discretionary funds to pay the balance of the residential contract placement(s) costs; and~~
- ~~(C) — funds generated by the formula for residential costs described in subsection (b)(2)(B) of this section shall not exceed the daily rate recommended by the Texas Department of Family and Protective Services for the specific level of care in which the student is placed.~~
- ~~(c) — Approval of the education program for facilities which provide educational services. Residential facilities which provide educational services must have their educational programs approved for contracting purposes by the commissioner of education.~~
- ~~(1) — If the education program of a residential facility which is not approved by the commissioner of education is being considered for a residential placement by a local school district, the school district should notify the TEA in writing of its intent to place a student at the facility. The TEA shall begin approval procedures and conduct an on-site visit to the facility within 30 calendar days after the TEA has been notified by the local school district. Approval of the education program of a residential facility may be for one, two, or three years.~~

- ~~(2) The commissioner of education shall renew approvals and issue new approvals only for those facilities which have contract students already placed or which have a pending request for residential placement from a school district. This approval does not apply to residential facilities which only provide related services or residential facilities in which the local accredited school district where the facility is located provides the educational program.~~
- ~~(3) School districts which contract for out of state residential placement shall do so in accordance with the rules for in state residential placement in this section, except that the facility must be approved by the appropriate agency in the state in which the facility is located, rather than by the commissioner of education in Texas.]~~

[§89.63. Instructional Arrangements and Settings.]

- ~~(a) Each local school district shall be able to provide services with special education personnel to students with disabilities in order to meet the special needs of those students in accordance with 34 Code of Federal Regulations, §§300.114-300.118.~~
- ~~(b) Subject to §89.1075(e) of this title (relating to General Program Requirements and Local District Procedures) for the purpose of determining the student's instructional arrangement/setting, the regular school day is defined as the period of time determined appropriate by the admission, review, and dismissal (ARD) committee.~~
- ~~(c) Instructional arrangements/settings shall be based on the individual needs and individualized education programs (IEPs) of eligible students receiving special education services and shall include the following:~~
- ~~(1) Mainstream. This instructional arrangement/setting is for providing special education and related services to a student in the regular classroom in accordance with the student's IEP. Qualified special education personnel must be involved in the implementation of the student's IEP through the provision of direct, indirect and/or support services to the student, and/or the student's regular classroom teacher(s) necessary to enrich the regular classroom and enable student success. The student's IEP must specify the services that will be provided by qualified special education personnel to enable the student to appropriately progress in the general education curriculum and/or appropriately advance in achieving the goals set out in the student's IEP. Examples of services provided in this instructional arrangement include, but are not limited to, direct instruction, helping teacher, team teaching, co-teaching, interpreter, education aides, curricular or instructional modifications/accommodations, special materials/equipment, positive classroom behavioral interventions and supports, consultation with the student and his/her regular classroom teacher(s) regarding the student's progress in regular education classes, staff development, and reduction of ratio of students to instructional staff.~~
- ~~(2) Homebound. This instructional arrangement/setting is for providing special education and related services to students who are served at home or hospital bedside.~~
- ~~(A) Students served on a homebound or hospital bedside basis are expected to be confined for a minimum of four consecutive weeks as documented by a physician licensed to practice in the United States. Homebound or hospital bedside instruction may, as provided by local district policy, also be provided to chronically ill students who are expected to be confined for any period of time totaling at least four weeks throughout the school year as documented by a physician licensed to practice in the United States. The student's ARD committee shall determine the amount of services to be provided to the student in this instructional arrangement/setting in accordance with federal and state laws, rules, and regulations, including the provisions specified in subsection (b) of this section.~~
- ~~(B) Home instruction may also be used for services to infants and toddlers (birth through age 2) and young children (ages 3-5) when determined appropriate by the child's individualized family services plan (IFSP) committee or ARD committee. This arrangement/setting also applies to school districts described in Texas Education Code, §29.014.~~

- ~~(3) Hospital class. This instructional arrangement/setting is for providing special education instruction in a classroom, in a hospital facility, or a residential care and treatment facility not operated by the school district. If the students residing in the facility are provided special education services outside the facility, they are considered to be served in the instructional arrangement in which they are placed and are not to be considered as in a hospital class.~~
- ~~(4) Speech therapy. This instructional arrangement/setting is for providing speech therapy services whether in a regular education classroom or in a setting other than a regular education classroom. When the only special education or related service provided to a student is speech therapy, then this instructional arrangement may not be combined with any other instructional arrangement.~~
- ~~(5) Resource room/services. This instructional arrangement/setting is for providing special education and related services to a student in a setting other than regular education for less than 50% of the regular school day.~~
- ~~(6) Self-contained (mild, moderate, or severe) regular campus. This instructional arrangement/setting is for providing special education and related services to a student who is in a self-contained program for 50% or more of the regular school day on a regular school campus.~~
- ~~(7) Off home campus. This instructional arrangement/setting is for providing special education and related services to the following, including, but not limited to, students at South Texas Independent School District and Windham Independent School District:~~
- ~~(A) a student who is one of a group of students from more than one school district served in a single location when a free appropriate public education is not available in the respective sending district;~~
- ~~(B) a student in a community setting or environment (not operated by a school district) that prepares the student for postsecondary education/training, integrated employment, and/or independent living in coordination with the student's individual transition goals and objectives, including a student with regularly scheduled instruction or direct involvement provided by school district personnel, or a student in a facility not operated by a school district (other than a nonpublic day school) with instruction provided by school district personnel; or~~
- ~~(C) a student in a self-contained program at a separate campus operated by the school district that provides only special education and related services.~~
- ~~(8) Nonpublic day school. This instructional arrangement/setting is for providing special education and related services to students through a contractual agreement with a nonpublic school for special education.~~
- ~~(9) Vocational adjustment class/program. This instructional arrangement/setting is for providing special education and related services to a student who is placed on a job (paid or unpaid unless otherwise prohibited by law) with regularly scheduled direct involvement by special education personnel in the implementation of the student's IEP. This instructional arrangement/setting shall be used in conjunction with the student's individual transition goals and only after the school district's career and technical education classes have been considered and determined inappropriate for the student.~~
- ~~(10) Residential care and treatment facility (not school district resident). This instructional arrangement/setting is for providing special education instruction and related services to students who reside in care and treatment facilities and whose parents do not reside within the boundaries of the school district providing educational services to the students. In order to be considered in this arrangement, the services must be provided on a school district campus. If the instruction is provided at the facility, rather than on a school district campus, the instructional arrangement is considered to be the hospital class arrangement/setting rather than this instructional arrangement. Students with disabilities who reside in these facilities may be included in the average daily attendance of the district in the same way as all other students receiving special education.~~

- ~~(1) State supported living center. This instructional arrangement/setting is for providing special education and related services to a student who resides at a state supported living center when the services are provided at the state supported living center location. If services are provided on a local school district campus, the student is considered to be served in the residential care and treatment facility arrangement/setting.~~
- ~~(d) The appropriate instructional arrangement for students from birth through the age of two with visual and/or auditory impairments shall be determined in accordance with the IFSP, current attendance guidelines, and the agreement memorandum between the Texas Education Agency (TEA) and the Department of Assistive and Rehabilitative Services (DARS) Early Childhood Intervention (ECI) Services.~~
- ~~(e) For nonpublic day school placements, the school district or shared service arrangement shall submit information to the TEA indicating the students' identification numbers, initial dates of placement, and the names of the facilities with which the school district or shared service arrangement is contracting. The school district or shared service arrangement shall not count contract students' average daily attendance as eligible. The TEA shall determine the number of contract students reported in full time equivalents and pay state funds to the district according to the formula prescribed in law.~~
- ~~(f) Other program options which may be considered for the delivery of special education and related services to a student may include the following:~~
- ~~(1) contracts with other school districts; and~~
 - ~~(2) other program options as approved by the TEA.]~~

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**TEXAS PERMANENT SCHOOL FUND
SUMMARY OF TRANSACTIONS FOR APPROVAL
(Including External Manager's Trades)
For May 1, 2021 through June 30, 2021**

Purchases/Capital Calls:

Long Term Fixed Income	\$ 370,679,182
Public Market Equities	348,277,673
Alternative Investments	<u>393,355,878</u>
 TOTAL	 <u><u>\$ 1,112,312,733</u></u>

Sales/Distributions:

Long Term Fixed Income	\$ 156,058,173
Public Market Equities	295,161,389
Alternative Investments	<u>780,436,717</u>
 TOTAL	 <u><u>\$ 1,231,656,279</u></u>

General Land Office Contributions:

FY 2020 Cumulative June 2020	FY 2021 Cumulative June 2021
\$7,500,000	\$33,750,000

Based on the above information provided by staff including a report that deposits to the Permanent School Fund from the General Land Office were \$7,500,000 through June 2020 for fiscal year 2020 versus \$33,750,000 through June 2021 for fiscal year 2021, and the recommendation of the Executive Administrator and Chief Investment Officer and the Commissioner of Education; it is moved by unanimous consent that the Committee on School Finance/Permanent School Fund ratify for the months of May 2021 and June 2021 Permanent School Fund portfolio purchases of \$1,112,312,733 and sales of \$1,231,656,279.

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**TEXAS PERMANENT SCHOOL FUND
SUMMARY OF TRANSACTIONS FOR APPROVAL
FOR PSF LIQUID ACCOUNTS
For May 1, 2021 through June 30, 2021**

<u>Purchases:</u>		
	Fixed Income	\$ 69,620,345
	Public Market Equities	<u>86,451,505</u>
	TOTAL	<u><u>\$ 156,071,850</u></u>
 <u>Sales:</u>		
	Fixed Income	\$ 28,435,016
	Public Market Equities	<u>16,083,510</u>
	TOTAL	<u><u>\$ 44,518,526</u></u>

Based on the above information provided by staff and the recommendation of the Executive Administrator and Chief Investment officer and the Commissioner of Education: It is moved by unanimous consent that the Committee on School Finance/Permanent School Fund ratify for the period May 1, 2021 through June 30, 2021 Permanent School Fund Liquid Account purchases of \$156,071,850 and sales of \$44,518,526.

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ATTACHMENT 5
Text of Proposed Amendment to 19 TAC

Chapter 74. Curriculum Requirements

Subchapter C. Other Provisions

§74.28. Students with Dyslexia and Related Disorders.

- (a) In order to support and maintain full educational opportunity for students with dyslexia and related disorders and consistent with federal and state law, school districts and open-enrollment charter schools shall provide each student with dyslexia or a related disorder access to each program under which the student qualifies for services.
- (b) The board of trustees of a school district or the governing body of an open-enrollment charter school must ensure that procedures for identifying a student with dyslexia or a related disorder and for providing appropriate, evidence-based instructional services to the student are implemented in the district.
- (c) A school district's or open-enrollment charter school's procedures must be implemented according to the State Board of Education (SBOE) approved strategies for screening, individualized evaluation, and techniques for treating dyslexia and related disorders. The strategies and techniques are described in the "Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders " provided in this subsection. The handbook is a set of guidelines for school districts and open-enrollment charter schools that may be modified by the SBOE only with broad-based dialogue that includes input from educators and professionals in the field of reading and dyslexia and related disorders from across the state.
[Figure: 19 TAC §74.28\(c\)](#) ~~[Figure: 19 TAC §74.28(e)]~~ ~~[Figure: 19 TAC §74.28(e)]~~
- (d) Screening as described in the "Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders" and further evaluation should only be conducted by individuals who are trained in valid, evidence-based assessments and who are trained to appropriately evaluate students for dyslexia and related disorders.
- (e) A school district or open-enrollment charter school shall purchase a reading program or develop its own evidence-based reading program for students with dyslexia and related disorders that is aligned with the descriptors found in the "Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders." Teachers who screen and treat these students must be trained in instructional strategies that use individualized, intensive, multisensory, phonetic methods and a variety of writing and spelling components described in the "Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders. " The professional development activities specified by each open-enrollment charter school and district and/or campus planning and decision making committee shall include these instructional strategies.
- (f) At least five school days before any evaluation or identification procedure is used selectively with an individual student, the school district or open-enrollment charter school must provide written notification to the student's parent or guardian or another person standing in parental relation to the student of the proposed identification or evaluation. The notice must be in English, or to the extent practicable, the individual's native language and must include the following:
 - (1) a reasonable description of the evaluation procedure to be used with the individual student;
 - (2) information related to any instructional intervention or strategy used to assist the student prior to evaluation;
 - (3) an estimated time frame within which the evaluation will be completed; and
 - (4) specific contact information for the campus point of contact, relevant Parent Training and Information Projects, and any other appropriate parent resources.
- (g) Before a full individual and initial evaluation is conducted to determine whether a student has a disability under the Individuals with Disabilities Education Act (IDEA), the school district or open-enrollment charter school must notify the student's parent or guardian or another person standing in parental relation to

the student of its proposal to conduct an evaluation consistent with 34 Code of Federal Regulations (CFR), §300.503, provide all information required under subsection (f) of this section, and provide:

- (1) a copy of the procedural safeguards notice required by 34 CFR, §300.504;
 - (2) an opportunity to give written consent for the evaluation; and
 - (3) a copy of information required under Texas Education Code (TEC), §26.0081.
- (h) Parents/guardians of a student with dyslexia or a related disorder must be informed of all services and options available to the student, including general education interventions under response to intervention and multi-tiered systems of support models as required by TEC, §26.0081(d), and options under federal law, including IDEA and the Rehabilitation Act, §504.
- (i) Each school or open-enrollment charter school must provide each identified student access at his or her campus to instructional programs required in subsection (e) of this section and to the services of a teacher trained in dyslexia and related disorders. The school district or open-enrollment charter school may, with the approval of each student's parents or guardians, offer additional services at a centralized location. Such centralized services shall not preclude each student from receiving services at his or her campus.
- (j) Because early intervention is critical, a process for early identification, intervention, and support for students at risk for dyslexia and related disorders must be available in each district and open-enrollment charter school as outlined in the "Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders." School districts and open-enrollment charter schools may not use early intervention strategies, including multi-tiered systems of support, to delay or deny the provision of a full and individual evaluation to a child suspected of having a specific learning disability, including dyslexia or a related disorder.
- (k) Each school district and open-enrollment charter school shall report through the Texas Student Data System Public Education Information Management System (TSDS PEIMS) the results of the screening for dyslexia and related disorders required for each student in Kindergarten and each student in Grade 1 in accordance with TEC, §38.003(a).
- (l) Each school district and open-enrollment charter school shall provide a parent education program for parents/guardians of students with dyslexia and related disorders. This program must include:
- (1) awareness and characteristics of dyslexia and related disorders;
 - (2) information on testing and diagnosis of dyslexia and related disorders;
 - (3) information on effective strategies for teaching students with dyslexia and related disorders;
 - (4) information on qualifications of those delivering services to students with dyslexia and related disorders;
 - (5) awareness of information on accommodations and modifications, especially those allowed for standardized testing;
 - (6) information on eligibility, evaluation requests, and services available under IDEA and the Rehabilitation Act, §504, and information on the response to intervention process; and
 - (7) contact information for the relevant regional and/or school district or open-enrollment charter school specialists.
- (m) School districts and open-enrollment charter schools shall provide to parents of children suspected to have dyslexia or a related disorder a copy or a link to the electronic version of the "Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders."
- (n) School districts and open-enrollment charter schools will be subject to monitoring for compliance with federal law and regulations in connection with this section. School districts and open-enrollment charter schools will be subject to auditing and monitoring for compliance with state dyslexia laws in accordance with administrative rules adopted by the commissioner of education as required by TEC, §38.003(c-1).

THE DYSLEXIA HANDBOOK

2021 Update

Procedures Concerning
Dyslexia and Related
Disorders

TEXAS EDUCATION AGENCY • AUSTIN, TEXAS

SEPTEMBER 2021

SBOE - 9/3/2021

23

THE DYSLEXIA HANDBOOK

Procedures Concerning Dyslexia and Related Disorders

2021 Update

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Foreword

Reading is the fundamental skill upon which all formal education depends. Research now shows that a child who doesn't learn the reading basics early is unlikely to learn them at all. Any child who doesn't learn to read early and well will not easily master other skills and knowledge and is unlikely to ever flourish in school or life.

—Moats. L.C. *Reading is Rocket Science: What Expert Teachers of Reading Should Know and be Able to Do*, 1999

Texas has a long history of supporting the fundamental skill of reading. This history includes a focus on early identification and intervention for children who experience reading difficulties. In support of dyslexia legislation passed by the Texas Legislature, the State Board of Education (SBOE) first approved the handbook, *Dyslexia and Related Disorders: An Overview of State and Federal Requirements* in January 1986.

The SBOE approved new guidelines called the *Revised Procedures Concerning Dyslexia and Related Disorders* in 1992, which were revised in 1998. The handbook was updated again in 2001 and was called *The Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders*. The SBOE continued to stress the importance of using research-based strategies to prevent reading difficulties and provide appropriate instruction to struggling readers in November 2006 when *The Dyslexia Handbook Revised 2007: Procedures Concerning Dyslexia and Related Disorders* was approved. In the summer of 2010, the need arose for an update of the handbook to include new legislation and additional research.

Legislation passed in the 82nd and 83rd sessions of the Texas Legislature resulted in the need for revision of the handbook. Consequently, *The Dyslexia Handbook—Revised 2014: Procedures Concerning Dyslexia and Related Disorders* was approved by the SBOE in July 2014. The most recent version, *The Dyslexia Handbook—2018 Update: Procedures Concerning Dyslexia and Related Disorders (Dyslexia Handbook)* implements statutory requirements added by the 85th Texas Legislature. The *Dyslexia Handbook* provides guidelines for school districts to follow as they identify and provide services for students with dyslexia and related disorders. Additionally, the handbook provides school districts and parents/guardians with information regarding the state's dyslexia laws and their relation to these federal laws: the Rehabilitation Act of 1973, Section 504 as amended in 2008 (Section 504), the Americans with Disabilities Amendments Act and the Individuals with Disabilities Education Act (IDEA). This handbook replaces all previous handbooks and guidelines.

There are also designated consultants at each regional education service center (ESC) available to assist district stakeholders with implementing state law and SBOE rules and procedures regarding dyslexia. Appendix E of this handbook contains information for the 20 ESCs. Or visit

In addition to *The Dyslexia Handbook*, resources include a State Dyslexia Network, a State Dyslexia Consultant, and a helpline (1-800-232-3030) at regional Education Service Center (ESC) 10.

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Acknowledgments

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Dedication

The 2018 Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders was dedicated in honor of Geraldine "Tincy" Miller in recognition of her tireless work on behalf of all Texas children with dyslexia.

Preface

In the state of Texas, students who continue to struggle with reading, despite appropriate or intensified instruction, are provided organized systems of reading support. Some students struggle during early reading acquisition while others do not struggle until the later grades, even at the postsecondary level. Here they face more complex language demands, for example reading textbooks, academic texts, and other print materials. For many struggling readers, the difficulty may be due to dyslexia. Dyslexia is found in all student populations and languages. Some students with dyslexia may be English Learners (ELs) who struggle with reading not only in English, but also in their native language. In Texas, evaluation for dyslexia is conducted from kindergarten through grade 12.

The purpose of *The Dyslexia Handbook* is to provide procedures for school districts, charter schools, campuses, teachers, students, and parents/guardians in early identification of, instruction for, and accommodations for students with dyslexia. This handbook will be used by school districts and charter schools as they develop their written procedures regarding students with dyslexia. It will also serve as a resource for educator preparation programs and other entities seeking guidance in serving students with dyslexia.

Texas Education Code (TEC) §38.003 defines dyslexia and related disorders, mandates screening and testing students for dyslexia and the provision of instruction for students with dyslexia and gives the State Board of Education (SBOE) authority to adopt rules and standards for screening, testing, and serving students with dyslexia. Texas Education Code §7.028(b) assigns the responsibility for school compliance with the requirements for state educational programs to the local district board of trustees. Title 19 of the Texas Administrative Code (TAC) §74.28 outlines the responsibilities of districts and charter schools in the delivery of services to students with dyslexia. Finally, two federal laws, the Individuals with Disabilities Education Act (IDEA) and the Rehabilitation Act of 1973, Section 504, establish assessment and evaluation standards and procedures for students (34 C.F.R. Part 300 (IDEA), Part 104 (Section 504)).

This handbook reflects current law as well as legislative action from the 84th and 85th sessions of the Texas Legislature and replaces all previous handbook editions. Recent legislation includes the following:

- TEC §21.044(c)(2) outlines the curriculum requirement for teacher preparation programs to include the characteristics of dyslexia, identification of dyslexia, and multisensory strategies for teaching students with dyslexia.
- TEC §21.054(b) and 19 TAC §232.11(e) mandate continuing education requirements for educators who teach students with dyslexia.
- TEC §28.021(b) establishes guidelines for districts when measuring academic achievement or proficiency of students with dyslexia.
- TEC §38.003(a) requires students to be screened or tested, as appropriate, for dyslexia and related disorders at appropriate times in accordance with a program approved by the SBOE. Screening must occur at the end of the school year of each student in kindergarten and each student in the first grade.
- TEC §38.0032 requires the Texas Education Agency (TEA) to annually develop a list of training opportunities regarding dyslexia that satisfy continuing education requirements for educators who teach students with dyslexia.

- TEC §38.0031 requires the agency to establish a committee to develop a plan for integrating technology into the classroom to help accommodate students with dyslexia.
- TEC §42.006(a-1) requires school districts and open-enrollment charter schools to report through the Texas Student Data System (TSDS) Public Education Information Management System (PEIMS) the number of enrolled students who have been identified as having dyslexia.
- 19 TAC §230.23 requires TEA to provide accommodations for persons with dyslexia who take licensing examinations.

The following chapters are included in this handbook:

- I. Definitions and Characteristics of Dyslexia
- II. Screening
- III. Procedures for the Evaluation and Identification of Students with Dyslexia
- IV. Critical, Evidence-Based Components of Dyslexia Instruction
- V. Dysgraphia

The Dyslexia Handbook has 12 appendices:

- A. Questions and Answers
- B. Sources of Laws and Rules for Dyslexia Identification and Instruction
- C. State Laws and Rules Related to Dyslexia
- D. IDEA/Section 504 Side-by-Side Comparison
- E. Contacts for Further Information
- F. Associated Terms
- G. Bibliography
- H. Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities
- I. 2015 U.S. Department of Education Dyslexia Guidance
- J. Pathways for the Identification and Provision of Instruction for Students with Dyslexia
- K. Addressing Concerns about Dyslexia Programs
- L. History of Dyslexia Law

I. Definitions and Characteristics of Dyslexia

The student who struggles with reading and spelling often puzzles teachers and parents. The student displays ability to learn in the absence of print and receives the same classroom instruction that benefits most children; however, the student continues to struggle with some or all of the many facets of reading and spelling. This student may be a student with dyslexia.

Texas Education Code (TEC) §38.003 defines dyslexia and related disorders in the following way:

“Dyslexia” means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell, despite conventional instruction, adequate intelligence, and sociocultural opportunity.

“Related disorders” include disorders similar to or related to dyslexia, such as developmental auditory imperception, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability.

TEC §38.003(d)(1)-(2) (1995)

<http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.38.htm#38.003>

The International Dyslexia Association defines “dyslexia” in the following way:

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.

Adopted by the International Dyslexia Association Board of Directors,
November 12, 2002

Students identified as having dyslexia typically experience primary difficulties in phonological awareness, including phonemic awareness and manipulation, single-word reading, reading fluency, and spelling. Consequences may include difficulties in reading comprehension and/or written expression. These difficulties in phonological awareness are unexpected for the student’s age and educational level and are not primarily the result of language difference factors. Additionally, there is often a **family history** of similar difficulties.

The following are the primary reading/spelling characteristics of dyslexia:

- Difficulty reading words in isolation
- Difficulty accurately decoding unfamiliar words
- Difficulty with oral reading (slow, inaccurate, or labored without prosody)
- Difficulty spelling

It is important to note that individuals demonstrate differences in degree of impairment and may not exhibit all the characteristics listed above.

The reading/spelling characteristics are most often associated with the following:

- Segmenting, blending, and manipulating sounds in words (phonemic awareness)
- Learning the names of letters and their associated sounds
- Holding information about sounds and words in memory (phonological memory)
- Rapidly recalling the names of familiar objects, colors, or letters of the alphabet (rapid naming)

Consequences of dyslexia may include the following:

- Variable difficulty with aspects of reading comprehension
- Variable difficulty with aspects of written language
- Limited vocabulary growth due to reduced reading experiences

Sources for Characteristics and Consequences of Dyslexia

Branum-Martin, L., Fletcher, J. M., & Stuebing, K. K. (2013). Classification and identification of reading and math disabilities: The special case of comorbidity. *Journal of Learning Disabilities, 12*, 906–915.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). *Learning disabilities: From identification to intervention*. New York, NY: The Guilford Press.

The International Dyslexia Association. (2018). *Knowledge and practice standards for teachers of reading*, (2nd ed.). Retrieved from <https://app.box.com/s/21gdk2k1p3bnagdfz1xy0v98j5ytl1w>.

Moats, L. C., & Dakin, K. E. (2008). *Basic facts about dyslexia and other reading problems*. Baltimore, MD: The International Dyslexia Association.

Evidence-based Core Reading Instruction (Tier I)

House Bill 3, passed by the 86th Legislature, requires each school district and open-enrollment charter school to provide for the use of a phonics curriculum that uses systematic direct instruction in kindergarten through third grade to ensure all students obtain necessary early literacy skills. Districts and charter schools must ensure that all kindergarten, first, second, and third grade teachers attend a teacher literacy achievement academy to increase teacher knowledge and implementation of the science of teaching reading. Additionally, districts and charter schools must certify to the agency that they prioritize placement of highly effective teachers in kindergarten through second grade and have integrated reading instruments used to diagnose reading development and comprehension to support each student in prekindergarten through third grade. This handbook assumes that all students have received strong systematic reading instruction in Tier 1.

Connecting Research and Practice

Research in understanding dyslexia as a neurodevelopmental disorder is ongoing. Future research will assist in learning more about the phonological awareness deficit and how this deficit interacts with other risk factors related to dyslexia. Research is now also focusing on the developmental cause of neural abnormalities and how these predict treatment response.

Pennington, B. F. (2009). *Diagnosing learning disorders: A neuropsychological framework* (2nd ed.). New York, NY: The Guilford Press.

Peterson, R. L., & Pennington, B. F. (2012). Developmental dyslexia. *The Lancet, 379*(9830), 1997–2007.

Common Risk Factors Associated with Dyslexia

If the following behaviors are unexpected for an individual's age, educational level, or cognitive abilities, they may be risk factors associated with dyslexia. A student with dyslexia usually exhibits several of these behaviors that persist over time and interfere with his/her learning. A family history of dyslexia may be present; in fact, recent studies reveal that the whole spectrum of reading disabilities is strongly determined by genetic predispositions (inherited aptitudes) (Olson, Keenan, Byrne, & Samuelsson, 2014).

The following characteristics identify risk factors associated with dyslexia at different stages or grade levels.

Preschool

- Delay in learning to talk
- Difficulty with rhyming
- Difficulty pronouncing words (e.g., "pusgetti" for "spaghetti," "mawn lower" for "lawn mower")
- Poor auditory memory for nursery rhymes and chants
- Difficulty adding new vocabulary words
- Inability to recall the right word (word retrieval)
- Trouble learning and naming letters and numbers and remembering the letters in his/ her name
- Aversion to print (e.g., doesn't enjoy following along if a book is read aloud)

Kindergarten and First Grade

- Difficulty breaking words into smaller parts, or syllables (e.g., "baseball" can be pulled apart into "base" "ball" or "napkin" can be pulled apart into "nap" "kin")
- Difficulty identifying and manipulating sounds in syllables (e.g., "man" sounded out as /m/ /ă/ /n/)
- Difficulty remembering the names of letters and recalling their corresponding sounds
- Difficulty decoding single words (reading single words in isolation)
- Difficulty spelling words the way they sound (phonetically) or remembering letter sequences in very common words seen often in print (e.g., "sed" for "said")

Second Grade and Third Grade

Many of the previously described behaviors remain problematic along with the following:

- Difficulty recognizing common sight words (e.g., "to," "said," "been")
- Difficulty decoding single words
- Difficulty recalling the correct sounds for letters and letter patterns in reading
- Difficulty connecting speech sounds with appropriate letter or letter combinations and omitting letters in words for spelling (e.g., "after" spelled "eft")
- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Reliance on picture clues, story theme, or guessing at words
- Difficulty with written expression

Fourth Grade through Sixth Grade

Many of the previously described behaviors remain problematic along with the following:

- Difficulty reading aloud (e.g., fear of reading aloud in front of classmates)
- Avoidance of reading (particularly for pleasure)
- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Acquisition of less vocabulary due to reduced independent reading
- Use of less complicated words in writing that are easier to spell than more appropriate words (e.g., "big" instead of "enormous")

- Reliance on listening rather than reading for comprehension

Middle School and High School

Many of the previously described behaviors remain problematic along with the following:

- Difficulty with the volume of reading and written work
- Frustration with the amount of time required and energy expended for reading
- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Difficulty with written assignments
- Tendency to avoid reading (particularly for pleasure)
- Difficulty learning a foreign language

Postsecondary

Some students will not be identified as having dyslexia prior to entering college. The early years of reading difficulties evolve into slow, labored reading fluency. Many students will experience extreme frustration and fatigue due to the increasing demands of reading as the result of dyslexia. In making a diagnosis for dyslexia, a student's reading history, familial/genetic predisposition, and assessment history are critical. Many of the previously described behaviors may remain problematic along with the following:

- Difficulty pronouncing names of people and places or parts of words
- Difficulty remembering names of people and places
- Difficulty with word retrieval
- Difficulty with spoken vocabulary
- Difficulty completing the reading demands for multiple course requirements
- Difficulty with notetaking
- Difficulty with written production
- Difficulty remembering sequences (e.g., mathematical and/or scientific formulas)

Appendix H, Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities has been included for additional information.

Since dyslexia is a neurobiological, language-based disability that persists over time and interferes with an individual's learning, it is critical that identification and intervention occur as early as possible.

Associated Academic Difficulties and Other Conditions

The behaviors in the previous sections represent common difficulties that students with dyslexia may exhibit. In addition, students with dyslexia may have problems in written expression, reading comprehension, and mathematics as well as other complicating conditions and/or behaviors.

Besides academic struggles, some students with dyslexia may exhibit other complex conditions and/or behaviors. The most common co-occurring disorders with dyslexia are attention deficit hyperactivity disorder (ADHD) and specific developmental language disorders (Snowling & Stackhouse, 2006, pp. 8–9). Some, though not all, students with dyslexia may also experience symptoms such as anxiety, anger, depression, lack of motivation, or low self-esteem. In such instances, appropriate instructional/referral services need to be provided to ensure each student's needs are met.

These additional conditions can have a significant impact on the effectiveness of instruction provided to students with dyslexia. Motivation, in particular, has been shown to be critical to the success or failure of instructional practices. Regarding motivation, Torgesen states (as cited in Sedita, 2011), "even technically sound instructional

techniques are unlikely to succeed unless we can ensure that, most of the time, students are engaged and motivated to understand what they read” (p. 532). Acknowledging that students with dyslexia must exert extra effort to meet grade-level expectations, all the factors that may affect learning must be considered when identifying and providing instruction for students with dyslexia. ADHD or symptoms of anxiety, anger, depression, or low self-esteem may lower a student’s engagement in learning. Educators and parents should provide students with affirmation and an environment that fosters engagement and success.

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II. Screening

Overview of Chapter II

The purpose of Chapter II is to further clarify the following topics related to screening for dyslexia:

- The definition of universal screening
- Administration of screening instruments
- Interpretation of screening results
- Best practices for ongoing monitoring

Part A of Chapter II will cover the definition of universal screening as well as the local, state, and federal requirements related to dyslexia and related disorders, including the Child Find requirement imposed under the Individuals with Disabilities Education Act (IDEA).

Part B will address the administration of the required screening instruments for kindergarten and grade 1 students.

Part C will cover how the interpretation of the screening results affect the decisions that the school will make to determine when a student is at risk for reading difficulties, including dyslexia and related disorders.

Part D will address ongoing monitoring of students throughout their academic careers.

Part A: Universal Screening and State and Federal Requirements

The Importance of Early Screening

If the persistent achievement gap between dyslexic and typical readers is to be narrowed, or even closed, reading interventions must be implemented early, when children are still developing the basic foundation for reading acquisition. The persistent achievement gap poses serious consequences for dyslexic readers, including lower rates of high school graduation, higher levels of unemployment, and lower earnings because of lowered college attainment. Implementing effective reading programs early, even in preschool and kindergarten, offers the potential to reduce and perhaps even close the achievement gap between dyslexic and typical readers and bring their trajectories closer over time.

—Ferrer, et al., Achievement Gap in Reading Is Present as Early as First Grade and Persists through Adolescence, 2015

The early identification of students with dyslexia along with corresponding early intervention programs for these students will have significant implications for their future academic success. In the book *Straight Talk about Reading*, Hall and Moats (1999) state the following:

- Early identification is critical because the earlier the intervention, the easier it is to remediate.
- Inexpensive screening measures identify at-risk children in mid-kindergarten with 85 percent accuracy.
- If intervention is not provided before the age of eight, the probability of reading difficulties continuing into high school is 75 percent (pp. 279–280).

Research continues to support the need for early identification and assessment (Birsh, 2018; Sousa, 2005; Nevills & Wolfe, 2009). The rapid growth of the brain and its responsiveness to instruction in the primary years make the time from birth to age eight a critical period for literacy development (Nevills & Wolfe, 2009). Characteristics associated with reading difficulties are connected to spoken language. Difficulties in young children can be assessed through screenings of phonemic awareness and other phonological skills (Sousa, 2005). Additionally, Eden (2015) points out that “when appropriate intervention is applied early, it is not only more effective in younger children, but also increases the chances of sparing a child from the negative secondary consequences associated with reading failure, such as decline in self-confidence and depression.”

Keeping the above information in mind, it is essential to screen students for dyslexia and related disorders early in their academic careers.

State Requirements

In 2017, the 85th Texas Legislature passed House Bill (HB) 1886, amending Texas Education Code (TEC) §38.003, Screening and Treatment for Dyslexia,¹ to require that all kindergarten and first-grade public school students be screened for dyslexia and related disorders. Additionally, the law requires that all students beyond first grade be screened or tested as appropriate.

In response to the screening requirements of HB 1886, the SBOE amended its rule in 19 Texas Administrative Code (TAC) §74.28, Students with Dyslexia and Related Disorders. While this rule speaks primarily to evaluation and identification of a student with dyslexia or related disorders, it also requires that evaluations only be conducted by appropriately trained and qualified individuals. Guidelines regarding the required screening for kindergarten and first-grade students are discussed in Part B of this chapter.

A related state law adds an additional layer to screening requirements for public school students. Texas Education Code §28.006, Reading Diagnosis, requires each school district to administer to students in kindergarten, first grade, and second grade a reading instrument to diagnose student reading development and comprehension. This law also requires school districts to administer a reading instrument at the beginning of seventh grade to students who did not demonstrate reading proficiency on the sixth-grade state reading assessment. The law requires each school district to administer to kindergarten students a reading instrument adopted by the commissioner or an alternative reading instrument approved by the commissioner. The commissioner must adopt a list of reading instruments that a school district may use to diagnose student reading development and comprehension. Districts are permitted to use reading instruments other than those adopted by the commissioner for first, second, and seventh grades only when a district-level committee adopts these additional instruments. Texas Education Code §28.006(d) requires each district to report the results of these reading instruments to the district’s board of trustees, TEA, and the parent or guardian of each student.

Further, a school district is required to notify the parent or guardian of each student in kindergarten, first grade, or second grade who is determined to be at risk for dyslexia or other reading difficulties based on the results of the reading instruments. In accordance with TEC §28.006(g), an accelerated reading instruction program must be provided to these students.

¹ For the full text of the state laws and rules referenced in this chapter, please refer to Appendix C, State Laws and Rules Related to Dyslexia.

*Are the dyslexia screening under TEC §38.003
and the early reading diagnosis under TEC §28.006 the same?*

The answer to this question is not a simple one. School districts must meet the requirements of TEC §28.006 and §38.003, both of which deal, at least in part, with early screening for dyslexia.

Should a district wish to use a single instrument to meet the requirements of both TEC §28.006 and §38.003, the district may, but is not required to do so.

It is important to note that TEC §38.003 applies only to the screening of kindergarten and first-grade students for dyslexia and related disorders, whereas TEC §28.006 addresses general reading diagnoses for students in kindergarten and grades 1, 2, and 7. Districts that decide to use one instrument to meet the requirements of both the dyslexia screening and the early reading diagnosis for kindergarten and grade 1 must also continue to administer reading instruments to all second-grade students and to students in grade 7 who did not demonstrate proficiency on the state reading assessment for sixth grade.

The approved reading Instruments on the current list meet the requirements of TEC §28.006 and are available on the Texas Education Agency (TEA) website at <https://tea.texas.gov/academics/early-childhood-education/data-tool-selection-guidance>. The approved reading instruments include the required elements of a dyslexia screener. These instruments will meet the requirements of both the early reading diagnosis under TEC §28.006 and the dyslexia screening under TEC §38.003. This allows districts and charter schools to use an instrument from the approved list to satisfy both requirements should they choose to do so.

Should it be determined that funds are not available for the early reading instruments under TEC §28.006, districts are not required to notify parents/guardians of or implement the accelerated reading program. However, districts and charter schools **must** screen all students in kindergarten and grade 1 for dyslexia and related disorders regardless of the availability of funding.

While this chapter primarily addresses the screening required under TEC §38.003 for kindergarten and grade 1, the screening and ongoing monitoring of *all students* should be done regularly according to district, state, and federal laws and procedures.

Federal Requirements- Child Find

In addition to state and local requirements to screen and identify students who may be at risk for dyslexia, there are also overarching federal laws and regulations to identify students with disabilities, commonly referred to as Child Find. Child Find is a provision in the Individuals with Disabilities Education Act (IDEA), a federal law that requires the state to have policies and procedures in place to ensure that every student in the state who needs special education and related services is located, identified, and evaluated. The purpose of the IDEA is to ensure that students with disabilities are offered a free and appropriate public education (20 U.S.C. §1400(d); 34 C.F.R. §300.1). Because a student suspected of having dyslexia may be a student with a disability under the IDEA, the Child Find mandate includes these students. Therefore, when referring and evaluating students suspected of having dyslexia, LEAs must follow procedures for conducting a full individual and initial evaluation (FIIE) under the IDEA.

Another federal law that applies to students with disabilities in public school is Section 504 of the Rehabilitation Act of 1973, commonly referred to as Section 504. Under Section 504, public schools must annually attempt to identify and locate every qualified student with a disability residing in its jurisdiction and notify them and/or their parents of the requirements of Section 504.

Dyslexia Screening

Universal Screening

For purposes of this chapter, screening is defined as a universal measure administered to **all** students by qualified personnel to determine which students are at risk for dyslexia or reading difficulties and/or a related disorder. Screening is not a formal evaluation.

Timing of Screening

Texas Education Code §38.003 mandates that kindergarten students be screened at the end of the school year. In scheduling the kindergarten screener, districts and charter schools should consider the questions in Figure 2.1 below.

Figure 2.1. Considerations for Local Scheduling of Dyslexia Screening

- Has adequate time for instruction been provided during the school year?
- Has adequate time been provided to compile data prior to the end of the school year?
- How will the timing of the administration of the screener fit in with the timing of other required assessments?
- Has sufficient time been provided to inform parents in writing of the results of the reading instrument and whether the student is at risk for dyslexia or other reading difficulties?
- Has adequate time been provided for educators to offer appropriate interventions to the student?
- Has sufficient time been provided for decision making regarding next steps in the screening process?

Texas Education Code §38.003 does not explicitly state when first grade students must be screened. The SBOE, through approval of the rule which requires adherence to this handbook (TAC §74.28), has determined that students in first grade must be screened no later than the middle of the school year. Screening of first-grade students can begin anytime in the fall as the teacher deems appropriate. Grade 1 screening must conclude **no later than January 31 of each year**.

The timing of the grade 1 screening is designed to ensure that students are appropriately screened, and if necessary, evaluated further so that reading difficulties can be addressed in a timely manner. Because kindergarten is not mandatory in the State of Texas, some students will not have been enrolled in kindergarten and will therefore not have been screened prior to the first grade. Waiting too long in the first-grade year would delay critical early intervention for students at risk for dyslexia or reading difficulties. Screening of first grade students by the middle of the school year will ensure that sufficient time is provided for data gathering, evaluation, early intervention, etc., to meet the needs of students. Conducting the grade 1 screening no later than the middle of the school year will allow districts and charter schools to complete the evaluation process with enough time for interventions to be provided to the student prior to the end of first grade.

Other Related Disorders

It is important to note that, while TEC §38.003 requires that all students in kindergarten and grade 1 be screened for dyslexia and related disorders, at the time of the update to this handbook it was determined there are no grade-level appropriate screening instruments for dysgraphia and the other identified related disorders. For more information, please see Chapter V: Dysgraphia.

Local District Requirements

Each district may have additional policies and procedures in place regarding screening and evaluating students for dyslexia and related disorders. Refer to your district's website or administrative office for more information on local policies or search for information specific to your school district or charter school by accessing the *Legal Framework for the Child-Centered Special Education Process* at <http://framework.esc18.net/>.

Part B: Kindergarten-Grade 1 Universal Screening: Administration

Dyslexia screening is a tool for identifying children who are at risk for this learning disability, particularly in preschool, kindergarten, or first grade. This means that the screening does not “diagnose” dyslexia. Rather, it identifies “predictor variables” that raise red flags, so parents and teachers can intervene early and effectively.

—Richard Selznick, *Dyslexia Screening: Essential Concepts for Schools and Parents*, 2015

The importance of early interventions for students with reading difficulties cannot be overstated. In order for early interventions to be provided, a student must first be identified as at risk for dyslexia or another reading difficulty. While educators once delayed identification of reading difficulties until the middle elementary grades, recent research has encouraged the identification of children at risk for dyslexia and reading difficulties “prior to, or at the very least, the beginning of formal reading instruction” (Catts, 2017).

The requirement in TEC §38.003 that all kindergarten and first grade students be screened for dyslexia and related disorders is aligned with this shift to identify students at risk for dyslexia and reading difficulties when they are just beginning their formal education. Universal screeners generally measure reading or literacy-related skills such as sound-symbol recognition, letter knowledge, phonological awareness, and other skills. The International Dyslexia Association (2017) describes screening instruments as follows.

Screening measures, by definition, are typically brief assessments of a skill or ability that is highly predictive of a later outcome. Screening measures are designed to quickly differentiate students into one of two groups: 1) those who require intervention and 2) those who do not. A screening measure needs to focus on specific skills that are highly correlated with broader measures of reading achievement resulting in a highly accurate sorting of students.

—International Dyslexia Association, *Universal Screening: K-2 Reading*, 2017

Screening Instruments

While screening instruments can measure the skills and abilities of students at different grade levels, this section is dedicated to a discussion of instruments that may meet the dyslexia screening requirement for kindergarten and first grade students. As previously mentioned, at the time of the update to this handbook it was determined there are no grade-level appropriate screening instruments for dysgraphia and the other

identified related disorders. As a result, the focus of this section is on screening instruments for dyslexia and reading difficulties.

It is important that screening instruments be accurate and comprehensive; however, they need not be as comprehensive as an extensive individualized evaluation. With this in mind, various types of instruments that meet the criteria below could be used to screen for dyslexia.

In developing the criteria for the kindergarten and grade 1 screening instruments for dyslexia and other reading difficulties, it was important to differentiate between the skills and behaviors appropriate at each grade level. Additionally, with a sizable English Learner (EL) population in Texas, it was essential that Spanish language screening instruments be addressed. Therefore, criteria for both English and Spanish speakers are included.

Screener Criteria

Regardless of the primary language of the student, instruments used to screen for dyslexia and other reading difficulties must address the skills in Figure 2.2 below.

Figure 2.2. Criteria for English and Spanish Screening Instruments	
Kindergarten	First Grade
<ul style="list-style-type: none">• Letter Naming Fluency• Phonological Awareness	<ul style="list-style-type: none">• Word Reading Accuracy or Fluency• Phonological Awareness

While the selected screening instrument will be expected to measure each of the skills identified above, it is important that individuals who administer the screening instrument document student behaviors observed during the administration of the instrument. A list of behaviors that may be observed during the administration of the screening and which should be documented are included in Figure 2.3 below.

Figure 2.3. Student Behaviors Observed During Screening
<ul style="list-style-type: none">• Lack of automaticity• Difficulty sounding out words left to right• Guessing• Self-correcting• Inability to focus on reading• Avoidance behavior

Other Criteria

In addition to the measures of the skills identified in Figure 2.2 above, other criteria should be considered when selecting a screening instrument. Approved screening instruments must take only a brief time to administer and be cost effective. They must have established validity and reliability and standards. They must also include distinct indicators identifying students as either not at risk or at risk for dyslexia or reading difficulties. Screening instruments must also provide standardized directions for administration as well as clear guidance for the administrator regarding scoring and interpretation of indicators/results. Additionally, each screening instrument must include adequate training for educators on how to administer the instrument and interpret results.

Selecting an Appropriate Screening Instrument

Screening instruments must include a measure for each of the skills noted above. The commissioner of education is expected to periodically issue a request for English and Spanish screening instruments that meet the established criteria. Instruments that meet each of the criteria will be included on the Commissioner’s List of Reading Instruments. A district or charter school must select for use an instrument from the commissioner’s list. In determining which screening instrument to use, a district or charter school must consider the primary language of the student and other factors as determined by the local district or school.

Administration of Screening Instruments

Who May Administer the Dyslexia Screener

A district or charter school must ensure that appropriately trained and qualified individuals administer and interpret the results of the selected screening instrument. Please note that an educational aide is not eligible to administer or interpret the dyslexia screening instrument. Individuals who administer and interpret the screening instrument must, at minimum, meet the following qualifications:

- An individual who is certified/licensed in dyslexia; or
- A classroom teacher who holds a valid certification for kindergarten and grade 1.
(For a list of current certifications for kindergarten and grade 1, see the State Board for Educator Certification Teacher Assignment Chart at [https://tea.texas.gov/Texas_Educators/Certification/.](https://tea.texas.gov/Texas_Educators/Certification/))

BEST PRACTICE: Whenever possible, the student’s current classroom teacher should administer the screening instrument for dyslexia and reading difficulties.

Training

The individual who administers and interprets the screening instrument must receive training designed specifically for the selected instrument in the following:

- Characteristics of dyslexia and other reading difficulties
- Interpretation of screening results and at-risk indicators and decisions regarding placement/services

When to Administer the Dyslexia/Reading Screener

Districts and charter schools must implement a screening program that includes each of the following:

- Screening of **each** student in kindergarten at the end of the school year
- Screening of **each** student in the first grade no later than January 31

For more information on considerations regarding the scheduling of the mandated dyslexia screening, please refer to Part A, Dyslexia Screening, on p. 10.

Part C—Kindergarten-Grade 1 Universal Screening: Interpretation

The importance of early intervention cannot be overstated. Intervening early, before difficulties become intractable, offers the best hope for successful outcomes and prevention of long-term deficits. The purpose of screening is to help identify, as early as possible, the students at risk for dyslexia or other reading difficulties so that targeted intervention can be provided. Screening alone will never improve outcomes for students. The screening must lead to effective instruction for it to be useful. Therefore, once the screening has been administered the next steps are to analyze results, identify level of risk for each student, and make informed decisions. The next steps are broadly categorized as: refer for evaluation, implement targeted intervention, and/or continue with core instruction.

There are several important factors to consider when interpreting screening results. First, it is important to remember that there is no definitive test score that invariably identifies dyslexia. Dyslexia is a neurobiological disorder that exists along a continuum of severity. Similar to diabetes or hypertension, dyslexia is identified based on how far an individual’s condition departs from the average range. This makes

the identification of dyslexia more challenging than identifying other forms of disability.

Second, it is important to keep the definition and goals of screening in mind. The purpose of screening is to differentiate a smaller set of individuals who may be at risk for dyslexia. Screening, by definition, should never be the final determination of whether a student has dyslexia. Therefore, screening tools must be brief, efficient, and cost effective. Subsequent consideration of other data and information with the smaller group is then used to determine next steps. However, it is key to remember that “screening” represents the initial step in the process. Dyslexia referral and identification under IDEA must be individualized and based on multiple pieces of information, including results of the screening.

As with any evaluation, it is important that schools administer and interpret the screening instrument with fidelity. Screening tools use criterion-referenced criteria to establish cut points derived by the publisher of the tool. Cut points are used to group students into categories (e.g., at risk or not at risk) based on the results of the screening tool. Districts and charter schools must adhere to the cut points established by the published screening instrument.

In general, students scoring below the publisher-determined cut point are considered “at risk” for dyslexia, while those who score above the cut point are considered “not at risk” for dyslexia. However, it is important to realize that risk falls on a continuum and there will always be false positives (students who screen at risk when they are not) and false negatives (students who screen not at risk when they are). Consequently, continual progress monitoring and an ongoing review of data is important. Any student may be referred for a full individual and initial evaluation under IDEA, at any time, regardless of the results of the screening instrument.

Students falling well below the cut point have a much higher probability of being at risk for dyslexia while students scoring well above the cut point have lower probability of being at risk for dyslexia. The decision for what to do next is easiest for students whose scores fall at the extreme ends of the continuum. Students falling well above the cut point can be considered at low risk for dyslexia and are much less likely to need additional intervention or evaluation. Students scoring far below the cut point should be considered at high risk for dyslexia.

For students who are identified as at risk for dyslexia, the school should provide targeted intervention provided by the appropriate staff as determined by the district or charter school. The district or school should also continue the data collection and evaluation process outlined in Chapter III, Procedures for the Evaluation and Identification of Students with Dyslexia. It is important to note that the use of a tiered intervention process, such as Response to Intervention or RTI, must not be used to delay or deny an evaluation for dyslexia, especially when parent or teacher observations reveal the common characteristics of dyslexia.

For students who score close to the cut point, more information will be needed to make an informed decision regarding referral for evaluation, implementation of targeted interventions with progress monitoring, or continuation of core instruction only. Data gathering will provide this additional information.

Screening Data Gathering

Both quantitative and qualitative information are critical components of the screening process. Examples of quantitative and qualitative information used in determining next steps are provided in Figure 2.4 below.

Figure 2.4. Sources and Examples of Screening Data

Quantitative Information	Qualitative Information
<p>Results of—</p> <ul style="list-style-type: none"> • Current screening instruments • Previous screening instruments • Formal and informal classroom reading assessments • Additional brief and targeted skill assessments 	<ul style="list-style-type: none"> • Observations of student during screening (See Figure 2.3, Student Behaviors Observed During Screening) • Other observations of student progress • Teacher observations • Parent/guardian input (e.g., family history, early language skills) • Current student work samples • Work samples from earlier grade(s) • Intervention history

For students who fall close to the predetermined cut points, implementation of short-term, targeted intervention with regular progress monitoring is one way to determine if additional evaluation is needed. Teachers and administrators should also be mindful that screening for risk is an ongoing process. Decisions made based on a single-point-in-time screening instrument should always be reevaluated and altered as more information is obtained as instruction continues. See Part D of this chapter, *Best Practices for Ongoing Monitoring*, for additional information.

Screening data should always be shared with parents. Screening data should also be used by teachers and school administrators to guide instruction at the classroom level. When large percentages of students fall below the cut point (are at risk for dyslexia), it signals a need to review instructional programming and practices and teacher training in effective and explicit reading instruction.

Interpretation of Data

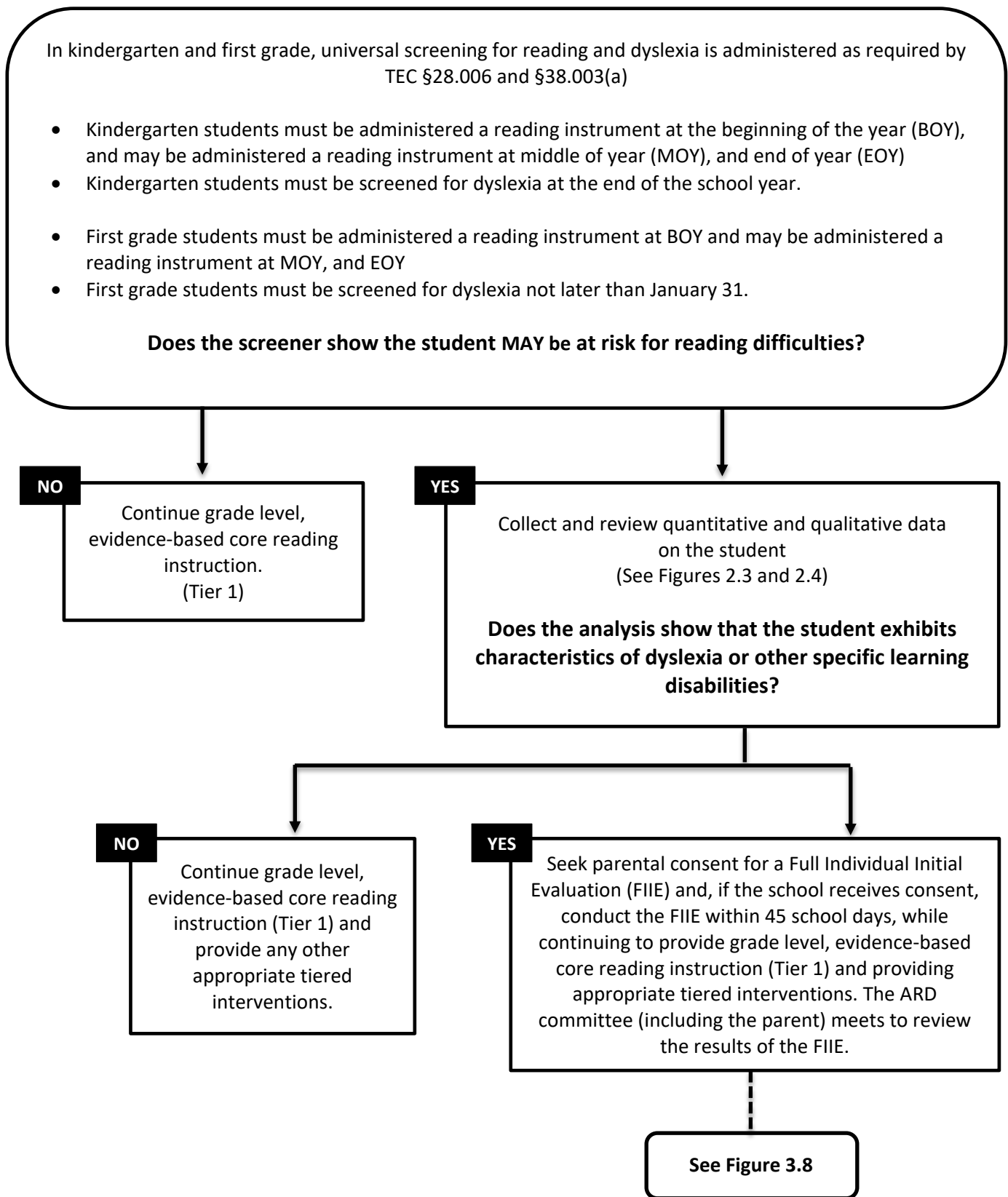
A qualified team is required to review all data to make informed decisions regarding whether a student exhibits characteristics of dyslexia. This team must consist of individuals who—

- have knowledge of the student;
- are appropriately trained in the administration of the screening tool;
- are trained to interpret the quantitative and qualitative results from the screening process; and
- recognize characteristics of dyslexia.

The team may consist of the student’s classroom teacher, the dyslexia specialist, the individual who administered the screener, a representative of the Language Proficiency Assessment Committee (LPAC) (as appropriate), and an administrator.

It is important to remember that at any point in the data review process a referral for a FIIE under the IDEA may be initiated. Parents also have the right to request a FIIE at any time. Regardless of the process in place for screening and data review, whenever accumulated data indicate that a student continues to struggle with one or more of the components of reading, despite the provision of adequate instruction and intervention, the student must be referred for a full individual and initial evaluation under the IDEA.

**Figure 2.5
Universal Screening and Data Review for
Reading Risk**



Part D: Best Practices for Ongoing Monitoring

Ongoing progress monitoring allows educators to assess student academic performance in order to evaluate student response to evidence-based instruction. Progress monitoring is also used to make diagnostic decisions regarding additional targeted instruction that may be necessary for the student.

While some kindergarten and first grade students may not initially appear to be at risk for dyslexia based on screening results, they may actually still be at risk. Students who have learned to compensate for lack of reading ability and twice-exceptional students are two groups who may not initially appear to be at risk for dyslexia based on the results of a screening instrument.

Compensation

Some older students may not appear at first to exhibit the characteristics of dyslexia. They may demonstrate relatively accurate, but not fluent, reading.

The consequence is that such dyslexic older children may appear to perform reasonably well on a test of word reading or decoding; on these tests, credit is given irrespective of how long it takes the individual to respond or if initial errors in reading are later corrected.

—Shaywitz, S.E., Morris, R., Shaywitz, B.A., *The Education of Dyslexic Children from Childhood to Young Adulthood*, 2008

Awareness of this developmental pattern is critically important for the diagnosis in older children, young adults, and beyond. According to Shaywitz, et al., examining reading fluency and reading rate would provide more accurate information for these students.

Twice Exceptionality

Twice-exceptional students may not initially appear to be at risk for dyslexia. Twice exceptional, or 2e, is a term used to describe students who are both intellectually gifted and learning disabled, which may include students with dyslexia. Parents and teachers may fail to notice either giftedness or dyslexia in a student as the dyslexia may mask giftedness or the giftedness may mask dyslexia.

The International Dyslexia Association's Gifted and Dyslexic: Identifying and Instructing the Twice Exceptional Student Fact Sheet (2013), identifies the following common characteristics of twice-exceptional students.

- Superior oral vocabulary
- Advanced ideas and opinions
- High levels of creativity and problem-solving ability
- Extremely curious, imaginative, and questioning
- Discrepant verbal and performance skills
- Clear peaks and valleys in cognitive test profile
- Wide range of interests not related to school
- Specific talent or consuming interest area
- Sophisticated sense of humor

For additional information on twice-exceptional students, see Chapter IV, Critical, Evidence-Based Components of Dyslexia Instruction.

For a description of common risk factors of dyslexia that may be seen in older students, refer to Chapter I, Definitions & Characteristics of Dyslexia.

Best Practices in Progress Monitoring

It is essential that schools continue to monitor students for common risk factors for dyslexia in second grade and beyond. In accordance with TEC §38.003(a), school districts **MUST** evaluate for dyslexia at appropriate times. If regular progress monitoring reflects a difficulty with reading, decoding, and/or reading comprehension, it is appropriate to evaluate for dyslexia and/or other learning disabilities. Free tools approved by the commissioner of education as of the 2021-2022 school year can assist districts in measuring student's reading development at first and second grade. For more information on these tools, see the TEA Early Childhood Data Tool Selection Guidance and/or other learning disabilities. Schools should be aware that a student may have reached middle school or high school without ever being screened, evaluated, or identified; however, the student may have dyslexia or a related disorder. One goal of ongoing monitoring is to identify these students regardless of their grade level.

Therefore, it is important to remember that a referral for a dyslexia evaluation can be considered at any time kindergarten–high school.

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III. Procedures for the Evaluation and Identification of Students with Dyslexia

Science has moved forward at a rapid pace so that we now possess the data to reliably define dyslexia, to know its prevalence, its cognitive basis, its symptoms and remarkably, where it lives in the brain and evidence-based interventions which can turn a sad, struggling child into not only a good reader, but one who sees herself as a student with self-esteem and a fulfilling future.

—Shaywitz, S.E. Testimony Before the Committee on Science, Space, and Technology, U.S. House of Representatives, 2014

The evaluation and identification process for dyslexia can be multifaceted. The process involves both state and federal requirements that must be followed. The evaluation and identification process for students suspected of having dyslexia is guided by the Individuals with Disabilities Education Act (IDEA)

In Texas and throughout the country, there is a focus on a Response to Intervention (RTI) or a Multi-Tiered System of Supports (MTSS) process as a vehicle for meeting the academic and behavioral needs of all students. The components of the Student Success Initiative (SSI) and other state-level programs offer additional support. Current federal legislation under the Elementary and Secondary Education Act (ESEA), as amended by the Every Student Succeeds Act of 2015 (ESSA), calls for the use of benchmark assessments for early identification of struggling students before they fail. In fact, state law requires the use of early reading assessments that are built on substantial evidence of best practices. Carefully chosen, these assessments can give crucial information about a student’s learning and can provide a basis for the tiered intervention model. Through the tiered intervention process, schools can document students’ learning difficulties, provide ongoing evaluation, and monitor reading achievement progress for students at risk for dyslexia or other reading difficulties.

Early intervention is further emphasized as the result of research using neuroimaging. Diehl, Frost, Mencl, and Pugh (2011) discuss the need to determine the role that deficits in phonological awareness and phonemic awareness play in reading acquisition, thus improving [the](#) methodology for early intervention. The authors note that future research will be enabled by longitudinal studies of phonology remediation using various treatments. “It will be especially important to take a multilevel analysis approach that incorporates genetics, neuroanatomy, neurochemistry, and neurocircuitry, and also to combine the strengths of the different neuroimaging techniques” (Diehl et al., 2011, p. 230). Evaluation followed by structured intervention that incorporates new scientific research must be embraced.

State and Federal Law Regarding Early Identification and Intervention Prior to Formal Evaluation

Both state and federal legislation emphasize early identification and intervention for students who may be at risk for reading disabilities such as dyslexia. Those professionals responsible for working with students with reading difficulties should be familiar with the legislation listed in Figure 3.1 below.

Figure 3.1. State and Federal Laws

TEC §28.006, Reading Diagnosis

This state statute requires schools to administer early reading instruments to all students in kindergarten and grades 1 and 2 to assess their reading development and comprehension. Additionally, the law requires a reading instrument from the commissioner’s approved list be administered at the beginning of grade 7 to any student who did not demonstrate proficiency on the sixth-grade reading assessment administered under TEC §39.023(a). If, on the basis of the reading instrument results, students are determined to be at risk for dyslexia or other reading difficulties, the school must notify the students’ parents/guardians. According to TEC §28.006(g), the school must also implement an accelerated (intensive) reading program that appropriately addresses the students’ reading difficulties and enables them to catch up with their typically performing peers.

TEC §38.003, Screening and Treatment for Dyslexia

Texas state law requires that public school students be screened and tested, as appropriate, for dyslexia and related disorders at appropriate times in accordance with a program approved by the SBOE. The program approved by the SBOE must include screening for each student at the end of the kindergarten year and then again during first grade.

Elementary and Secondary Education Act (ESEA) as reauthorized by the Every Student Succeeds Act of 2015 (ESSA)

The services offered to students who are reported to be at risk for dyslexia or other reading difficulties should align to the requirements of ESSA, which requires schools to implement comprehensive literacy instruction featuring “age-appropriate, explicit, systematic, and intentional instruction in phonological awareness, phonic decoding, vocabulary, language structure, reading fluency, and reading comprehension” (ESSA, 2015).

Equal Education Opportunity Act (EEOA)

This civil rights law ensures that all students are given equal access to educational services regardless of race, color, sex, religion, or national origin. Therefore, research-based interventions are to be provided to all students experiencing difficulties in reading, including ELs, regardless of their proficiency in English.

Individuals with Disabilities Education Act (IDEA)

The most recent reauthorization of this federal act is consistent with ESSA in emphasizing quality of instruction and documentation of student progress. A process based on the student’s response to scientific, research-based intervention is one of the criteria included in IDEA that individual states may use in determining whether a student has a specific learning disability, including dyslexia.

As referenced in the 2011 letter from the Office of Special Education Programs (OSEP) to the State Directors of Special Education, states have an obligation to ensure that evaluations of children suspected of having a disability are not delayed or denied because of implementation of the RTI process (Musgrove, 2011). For more information, please visit www2.ed.gov/policy/speced/guid/idea/memosdcltrs/osep11-07rtimemo.pdf.

The Referral Process for Dyslexia and Related Disorders

The determination to refer a student for an evaluation must always be made on a case-by-case basis and must be driven by data-based decisions. The referral process itself can be distilled into a basic framework as

outlined below.

Data-Driven Meeting of Knowledgeable Persons

A team of persons with knowledge of the student, instructional practices, and instructional options meets to discuss data collected, including data obtained during kindergarten and/or first grade screening, and the implications of that data. These individuals include, but are not limited to, the classroom teacher, administrator, dyslexia specialist, and/or interventionist. This team may also include the parents and/or a diagnostician familiar with testing and interpreting evaluation results. This team may have different names in different districts and/or campuses. For example, the team may be called a student success team, student support team, student intervention team, or even something else. Unless the student is already served under IDEA or Section 504, this team of knowledgeable persons is not an Admission, Review, and Dismissal (ARD) committee or a Section 504 committee, although many of these individuals may be on a future committee if the student is referred for an evaluation.

When the Data Does Not Lead to Suspicion of a Disability, Including Dyslexia or a Related Disorder

If the team determines that the data does not give the members reason to suspect that a student has dyslexia, a related disorder, or other disability, the team may decide to provide the student with additional support in the classroom or through the RTI/MTSS process. The student should continue to receive grade level, evidence-based core reading instruction. (Tier 1) and any other appropriate tiered interventions. However, the student is not referred for an evaluation at this time.

When the Data Lead to a Suspicion of a Disability, Including Dyslexia or a Related Disorder

If the team suspects that the student has dyslexia, a related disorder, or another disability included within the IDEA, the team must refer the student for a full individual and initial evaluation (FIIE). In most cases, an FIIE under the IDEA must be completed within 45-school days from the time a district or charter school receives parental consent. The student should continue to receive grade level, evidence-based core reading instruction (Tier 1) and any other appropriate tiered interventions while the school conducts the FIIE.

Parents/guardians always have the right to request a referral for a dyslexia evaluation at any time. Once a parent request for dyslexia evaluation has been made, the school district is obligated to review the student's data history (both formal and informal data) to determine whether there is reason to suspect the student has a disability. If a disability is suspected, the student needs to be evaluated following the guidelines outlined in this chapter. Under the IDEA, if the school refuses the request to evaluate, it must give parents prior written notice of refusal to evaluate, including an explanation of why the school refuses to conduct an FIIE, the information that was used as the basis for the decision, and a copy of the *Notice of Procedural Safeguards*. Should the parent disagree with the school's refusal to conduct an evaluation, the parent has the right to initiate dispute resolution options including; mediation, state complaints, and due process hearings. Additionally, the parent may request an Independent Educational Evaluation (IEE) at public expense. Should the parent believe that their child is eligible for Section 504 aids, accommodations, and services the parent may request an evaluation under Section 504.

Procedures for Evaluation

As discussed in Chapter 2, Child Find is a provision in the federal Individuals with Disabilities Education Act (IDEA), a federal law that requires the state to have policies and procedures in place to ensure that every student in the state who needs special education and related services is located, identified, and evaluated. The purpose of the IDEA is to ensure that students with disabilities are offered a free and appropriate public education (20 U.S.C. §1400(d); 34 C.F.R. §300.1). Because a student suspected of having dyslexia may be a student with a disability under the IDEA, the Child Find mandate includes these students. Therefore, when referring and evaluating students suspected of having dyslexia, LEAs must follow procedures for conducting a full individual and initial evaluation (FIIE) under the IDEA. For detailed information regarding Child Find see <https://tea.texas.gov/sites/default/files/Technical%20Assistance%20-%20Child%20Find%20and%20Evaluation%20-%20June%202020%20Revised%28v5%29.pdf>

As discussed in Chapter II, all public-school students are required to be screened for dyslexia while in kindergarten and grade 1. Additionally, students enrolling in public schools in Texas must be assessed for dyslexia and related disorders “at appropriate times” (TEC §38.003(a)). The appropriate time depends upon multiple factors including the student’s reading performance; reading difficulties; poor response to supplemental, scientifically-based reading instruction; teachers’ input; and input from parents/guardians. The appropriate time for assessing is early in a student’s school career (19 TAC §74.28). Texas Education Code §28.006, Reading Diagnosis, requires assessment of reading development and comprehension for students in kindergarten, first grade, second grade, and as applicable, seventh grade. While earlier is better, students should be recommended for evaluation for dyslexia even if the reading difficulties appear later in a student’s school career.

While schools must follow federal and state guidelines, they must also develop local procedures that address the needs of their student populations. Schools must recommend evaluation for dyslexia if the student demonstrates the following:

- Poor performance in one or more areas of reading and spelling that is unexpected for the student’s age/grade
- Characteristics and risk factors of dyslexia indicated in Chapter I: Definitions & Characteristics of Dyslexia

1. Data Gathering

Schools collect data on all students to ensure that instruction is appropriate and scientifically based. Essential components of comprehensive literacy instruction are defined in Section 2221(b) of ESSA as explicit, systematic, and intentional instruction in the following:

- Phonological awareness
- Phonic coding
- Vocabulary
- Language structure
- Reading fluency
- Reading comprehension

When evaluating a student for dyslexia, the collection of various data, as indicated in Figure 3.2 below, will provide information regarding factors that may be contributing to or primary to the student’s struggles with reading and spelling.

Cumulative Data

The academic history of each student will provide the school with the cumulative data needed to ensure that underachievement in a student suspected of having dyslexia is not due to lack of appropriate instruction in reading. This information should include data that demonstrate that the student was provided appropriate instruction and include data-based documentation of repeated evaluations of achievement at reasonable intervals (progress monitoring), reflecting formal evaluation of student progress during instruction. These cumulative data also include information from parents/guardians. Sources and examples of cumulative data are provided in Figure 3.2.

Figure 3.2. Sources and Examples of Cumulative Data	
<ul style="list-style-type: none"> • Vision screening • Hearing screening • Teacher reports of classroom concerns • Classroom reading assessments • Accommodations or interventions provided • Academic progress reports (report cards) • Gifted/talented assessments • Samples of schoolwork • Parent conference notes • Results of kindergarten-grade 1 universal screening as required in TEC §38.003 • K–2 reading instrument results as required in TEC §28.006 (English and native language, if possible) 	<ul style="list-style-type: none"> • 7th-grade reading instrument results as required in TEC §28.006 • State student assessment program results as described in TEC §39.022 • Observations of instruction provided to the student • Previous evaluations • Outside evaluations • Speech and language assessment • School attendance • Curriculum-based assessment measures • Instructional strategies provided and student’s response to the instruction • Screening data • Parent survey

Environmental and Socioeconomic Factors

Information regarding a child's early literacy experiences, environmental factors, and socioeconomic status must be part of the data collected throughout the data gathering process. These data support the determination that difficulties in learning are not due to cultural factors or environmental or economic disadvantage. Studies that have examined language development and the effects of home experiences on young children indicate that home experiences and socioeconomic status have dramatic effects on cumulative vocabulary development (Hart & Risley, 1995). Having data related to these factors may help in determining whether the student’s struggles with reading are due to a lack of opportunity or a reading disability, including dyslexia.

Language Proficiency

Much diversity exists among ELs. A student’s language proficiency may be impacted by any of the following: native language, English exposure, parent education, socioeconomic status of the family, amount of time in the United States, experience with formal schooling, immigration status, community demographics, and ethnic heritage (Bailey, Heritage, Butler, & Walqui, 2000). ELs may be students served in bilingual and English as a second language (ESL) programs as well as students designated Limited English Proficient (LEP) whose parents have denied services. In addition to the information discussed in the previous section of this chapter, the Language Proficiency Assessment Committee (LPAC) maintains documentation (TAC §89.1220(g)-(i)) that is necessary to consider when identifying ELs with dyslexia. The LPAC is required to meet annually to review student placement and progress and consider instructional accommodations and interventions to address the student’s linguistic needs. Since the identification and service delivery process for dyslexia must be aligned to the student’s linguistic environment and educational background, involvement of the LPAC is required. Additional data sources for ELs are provided below in Figure 3.3.

Figure 3.3. Additional Data Sources for English Learners

- Home Language Survey
- Assessment related to identification for limited English proficiency (oral language proficiency test and norm-referenced tests—all years available)
- Texas English Language Proficiency Assessment System (TELPAS) information for four language domains (listening, speaking, reading, and writing)
- Instructional interventions provided to address language needs
- Information regarding previous schooling inside and/or outside the United States
- Type of language program model provided and language of instruction

Formal Evaluation

A formal evaluation is not a screening; rather, it is an individualized evaluation used to gather specific data about the student. Formal evaluation includes both formal and informal data. All data will be used to determine whether the student demonstrates a pattern of evidence that indicates dyslexia. Information collected from the parents/guardians also provides valuable insight into the student's early years of language development. This history may help explain why students come to the evaluation with many different strengths and weaknesses; therefore, findings from the formal evaluation will be different for each child. Professionals conducting evaluations for the identification of dyslexia will need to look beyond scores on standardized assessments alone and examine the student's classroom reading performance, educational history, early language experiences, and, when warranted, academic potential to assist with determining reading, spelling, and writing abilities and difficulties. As part of the evaluation when dyslexia is suspected, in addition to the parent and team of qualified professionals required under IDEA, it is recommended that the multi-disciplinary evaluation team include members who have specific knowledge regarding-

- the reading process,
- dyslexia and related disorders, and
- dyslexia instruction.

Notification and Permission

When formal evaluation is recommended, the school must complete the evaluation process as outlined in the IDEA. Procedural safeguards under IDEA must be followed. For more information on procedural safeguards, see TEA's [Parent Guide to the Admission, Review, and Dismissal Process \(Parent's Guide\)](#) and the [Notice of Procedural Safeguards](#).

Tests and Other Evaluation Materials

Test instruments and other evaluation materials must meet the following criteria:

- Used for the purpose for which the evaluation or measures are valid or reliable
- Include material(s) tailored to assess specific areas of educational need and not merely material(s) that are designed to provide a single, general intelligence quotient
- Selected and administered to ensure that when a test is given to a student with impaired sensory, manual, or speaking skills, the test results accurately reflect the student's aptitude, achievement level, or whatever other factor the test purports to measure rather than reflecting the student's impaired sensory, manual, or speaking skills
- Selected and administered in a manner that is not racially or culturally discriminatory
- Include multiple measures of a student's reading abilities such as informal assessment information (e.g., anecdotal records, district universal screenings, progress monitoring data, criterion-referenced evaluations, results of informal reading inventories, classroom observations)
- Administered by trained personnel and in conformance with the instructions provided by the producer of the evaluation materials
- Provided and administered in the student's native language or other mode of communication and in the form most likely to yield accurate information regarding what the child can do academically, developmentally, and functionally unless it is clearly not feasible to provide or administer

Additional Considerations for English Learners

A professional involved in the evaluation, interpretation of evaluation results, and identification of ELs with dyslexia must have the following training/knowledge:

- Knowledge of first and second language acquisition theory
- Knowledge of the written system of the first language: transparent (e.g., Spanish, Italian, German), syllabic (e.g., Japanese-kana), Semitic (e.g., Arabic, Hebrew), and morphosyllabic (e.g., Chinese-Kanji)
- Knowledge of the student’s literacy skills in native and second languages
- Knowledge of how to interpret results from a cross-linguistic perspective
- Knowledge of how to interpret TELPAS (Texas English Language Proficiency Assessment System) results
- Knowledge of how to interpret the results of the student’s oral language proficiency in two or more languages in relation to the results of the tests measuring academic achievement and cognitive processes as well as academic data gathered and economic and socioeconomic factors

Although data from previous formal testing of the student’s oral language proficiency may be available, as required by TEC §29.056, additional assessment of oral language proficiency should be completed for a dyslexia evaluation due to the importance of the information for—

- consideration in relation to academic challenges,
- planning the evaluation, and
- interpreting evaluation results.

If there is not a test in the native language of the student, informal measures of evaluation such as reading a list of words and listening comprehension in the native language may be used.

Domains to Assess Specific to Dyslexia

Academic Skills

The school administers measures that are related to the student’s educational needs. Difficulties in the areas of letter knowledge, word decoding, and fluency (rate, accuracy, and prosody) may be evident depending upon the student’s age and stage of reading development. In addition, many students with dyslexia may have difficulty with reading comprehension and written composition.

Cognitive Processes

Difficulties in phonological and phonemic awareness are typically seen in students with dyslexia and impact a student’s ability to learn letters and the sounds associated with letters, learn the alphabetic principle, decode words, and spell accurately. Rapid naming skills may or may not be weak, but if deficient, they are often associated with difficulties in automatically naming letters, reading words fluently, and reading connected text at an appropriate rate. Memory for letter patterns, letter sequences, and the letters in whole words (orthographic processing) may be selectively impaired or may coexist with phonological processing weaknesses. Finally, various language processes, such as morpheme and syntax awareness, memory and retrieval of verbal labels, and the ability to formulate ideas into grammatical sentences, may also be factors affecting reading (Berninger & Wolf, 2009, pp. 134–135).

Based on the student’s academic difficulties, characteristics, and/or language acquisition, additional areas related to vocabulary, listening comprehension, oral language proficiency, written expression, and other cognitive abilities may need to be assessed. Areas for evaluation are provided below in Figure 3.4.

Figure 3.4. Areas for Evaluation		
<u>Academic Skills</u>	<u>Cognitive Processes</u>	<u>Possible Additional Areas</u>
<ul style="list-style-type: none"> • Letter knowledge (name and associated sound) • Reading words in isolation • Decoding unfamiliar words accurately • Reading fluency (rate, accuracy, and prosody are assessed) • Reading comprehension • Spelling 	<ul style="list-style-type: none"> • Phonological/phonemic awareness • Rapid naming of symbols or objects 	<ul style="list-style-type: none"> • Vocabulary • Listening comprehension • Verbal expression • Written expression • Handwriting • Memory for letter or symbol sequences (orthographic processing) • Mathematical calculation/reasoning • Phonological memory • Verbal working memory • Processing speed

Review and Interpretation of Data and Evaluations

To appropriately **understand** evaluation data, the ARD committee must **interpret** test results in light of the student’s educational history, linguistic background, environmental or socioeconomic factors, and any other pertinent factors that affect learning. When considering the condition of dyslexia, in addition to required ARD committee members, the committee should also include members who have specific knowledge regarding—

- the reading process,
- dyslexia and related disorders, and
- dyslexia instruction.

A determination must first be made regarding whether a student’s difficulties in the areas of reading and spelling reflect a pattern of evidence for the primary characteristics of dyslexia with unexpectedly low performance for the student’s age and educational level in **some or all** of the following areas:

- Reading words in isolation
- Decoding unfamiliar words accurately and automatically
- Reading fluency for connected text (rate and/or accuracy and/or prosody)
- Spelling (an isolated difficulty in spelling would not be sufficient to identify dyslexia)

Another factor to consider when interpreting test results is the student’s linguistic background. The nature of the writing system of a language impacts the reading process. Thus, the identification guideposts of dyslexia in languages other than English may differ. For example, decoding in a language with a transparent written language (e.g., Spanish, German) may not be as decisive an indicator of dyslexia as reading rate. A transparent written language has a close letter/sound correspondence (Joshi & Aaron, 2006). Students with

dyslexia who have or who are being taught to read and write a transparent language may be able to decode real and nonwords adequately but demonstrate serious difficulties in reading rate with concurrent deficiencies in phonological awareness and rapid automatized naming (RAN).

Figure 3.5. Dyslexia in Transparent and Opaque Orthographies	
Opaque	Transparent
Early and marked difficulty with word-level reading	Less difficulty with word-level reading
Fluency and comprehension often improve once decoding is mastered	More difficulty with fluency and comprehension

Figure 3.6. Characteristics of Dyslexia in English and Spanish	
English	Spanish
Phonological awareness	Phonological awareness—may be less pronounced
Rapid naming	Rapid naming
Regular/irregular decoding	Decoding—fewer “irregular words” in Spanish
Fluency	Fluency—often a key indicator
Spelling	Spelling—may show fewer errors than in English, but still more than students that do not have dyslexia
Reading comprehension may be a weakness in both English and Spanish.	

Findings support guidance in the interpretation of phonological awareness test scores.

There is evidence that blending skills develop sooner than analysis skills, and that students can have good blending skills and inadequate reading development. Only when both blending and analysis skills are mastered do we see benefits for reading development.

—Kilpatrick, D.A. *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*, 2015

With this in mind, when determining phonological awareness deficits, evaluation personnel should examine subtest scores, including discreet phonological awareness skills, instead of limiting interpretation to composite scores since a deficit in even one skill will limit reading progress.

Based on the above information and guidelines, should the ARD committee determine that the student exhibits weaknesses in reading and spelling, the committee will then examine the student’s data to determine whether these difficulties are **unexpected** in relation to the student’s other abilities, sociocultural factors, language difference, irregular attendance, or lack of appropriate and effective instruction. For example, the student may exhibit strengths in areas such as reading comprehension, listening comprehension, math reasoning, or verbal ability yet still have difficulty with reading and spelling.

Therefore, it is not one single indicator but a preponderance of data (both informal and formal) that provide the committee with evidence for whether these difficulties are unexpected.

Dyslexia Identification

If the student’s difficulties are unexpected in relation to other abilities, the ARD committee must then determine if the student has dyslexia. For ELs, an LPAC representative must be included on the ARD committee. The list of questions in Figure 3.7 below must be considered when making a determination regarding dyslexia.

Figure 3.7. Questions to Determine the Identification of Dyslexia
<ul style="list-style-type: none">• Do the data show the following characteristics of dyslexia?<ul style="list-style-type: none">○ Difficulty with accurate and/or fluent word reading○ Poor spelling skills○ Poor decoding ability• Do these difficulties (typically) result from a deficit in the phonological component of language? (Please be mindful that average phonological scores alone do not rule out dyslexia.)• Are these difficulties unexpected for the student’s age in relation to the student’s other abilities and provision of effective classroom instruction?

If, through the evaluation process, it is established that the student has the condition of dyslexia, as described in Chapter 1, then the student meets the first prong of eligibility under the IDEA (identification of condition). In other words, the identification of dyslexia, using the process outlined in this chapter, meets the criterion for the condition of a specific learning disability in basic reading and/or reading fluency. However, the presence of a disability condition alone, is not sufficient to determine if the student is a student with a disability under the IDEA. Eligibility under the IDEA consists of both identification of the condition and a corresponding need for specially designed instruction as a result of the disability.

In IDEA, dyslexia is considered one of a variety of etiological foundations for specific learning disability (SLD). Section 34 C.F.R. §300.8(c)(10) states the following:

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

The term *SLD* does not apply to children who have learning difficulties that are primarily the result of visual, hearing, or motor disabilities; of intellectual disability; of emotional disturbance; or of environmental, cultural, or economic disadvantage.

The IDEA evaluation requirements for SLD eligibility in 34 C.F.R. §300.309(a)(1) specifically designate the following areas for a learning disability in reading: basic reading skills (dyslexia), reading fluency skills, and/or reading comprehension.

The October 23, 2015 letter from the Office of Special Education and Rehabilitative Services (OSERS) (Dear Colleague: Dyslexia Guidance) states that dyslexia, dyscalculia, and dysgraphia are conditions that could qualify a child as a child with a specific learning disability under the IDEA. The letter further states that there is nothing in the IDEA that would prohibit the use of the terms *dyslexia*, *dyscalculia*, and *dysgraphia* in the IDEA evaluation, eligibility determinations, or IEP documents. For more information, please visit <https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-dyslexia-10-2015.pdf>.

A 2018 Letter to the Administrator Addressed from the Texas Education Agency regarding the provision of services for students with dyslexia and related disorders states that any time it is suspected that a student requires special education or related services to provide appropriate reading supports and interventions, a referral for an FIIE should be initiated. The letter further states that all students who are identified with dyslexia or a related disorder *and* who require special education services because of dyslexia or a related disorder are eligible under the IDEA for special education and related services as students with a specific learning disability. For more information, please visit https://tea.texas.gov/About_TEA/News_and_Multimedia/Correspondence/TAA_Letters/Provision_of_Services_for_Students_with_Dyslexia_and_Related_Disorders_-_Revised_June_6,_2018/

Once the condition of dyslexia has been identified, a determination must be made regarding the most appropriate way to serve the student. If a student with dyslexia is found eligible for special education (i.e., student requires specially designed instruction), the student's IEP must include appropriate reading instruction. Appropriate reading instruction includes the components and delivery of dyslexia instruction discussed in Chapter IV: Critical, Evidence-Based Components of Dyslexia Instruction. If a student has previously met special education eligibility and is later identified with dyslexia, the ARD committee should include in the IEP goals that reflect the need for dyslexia instruction and determine the least restrictive environment for delivering the student's dyslexia instruction.

If—based on the data—the student is identified with dyslexia, but is not eligible for special education, the student may receive dyslexia instruction and accommodations under Section 504.

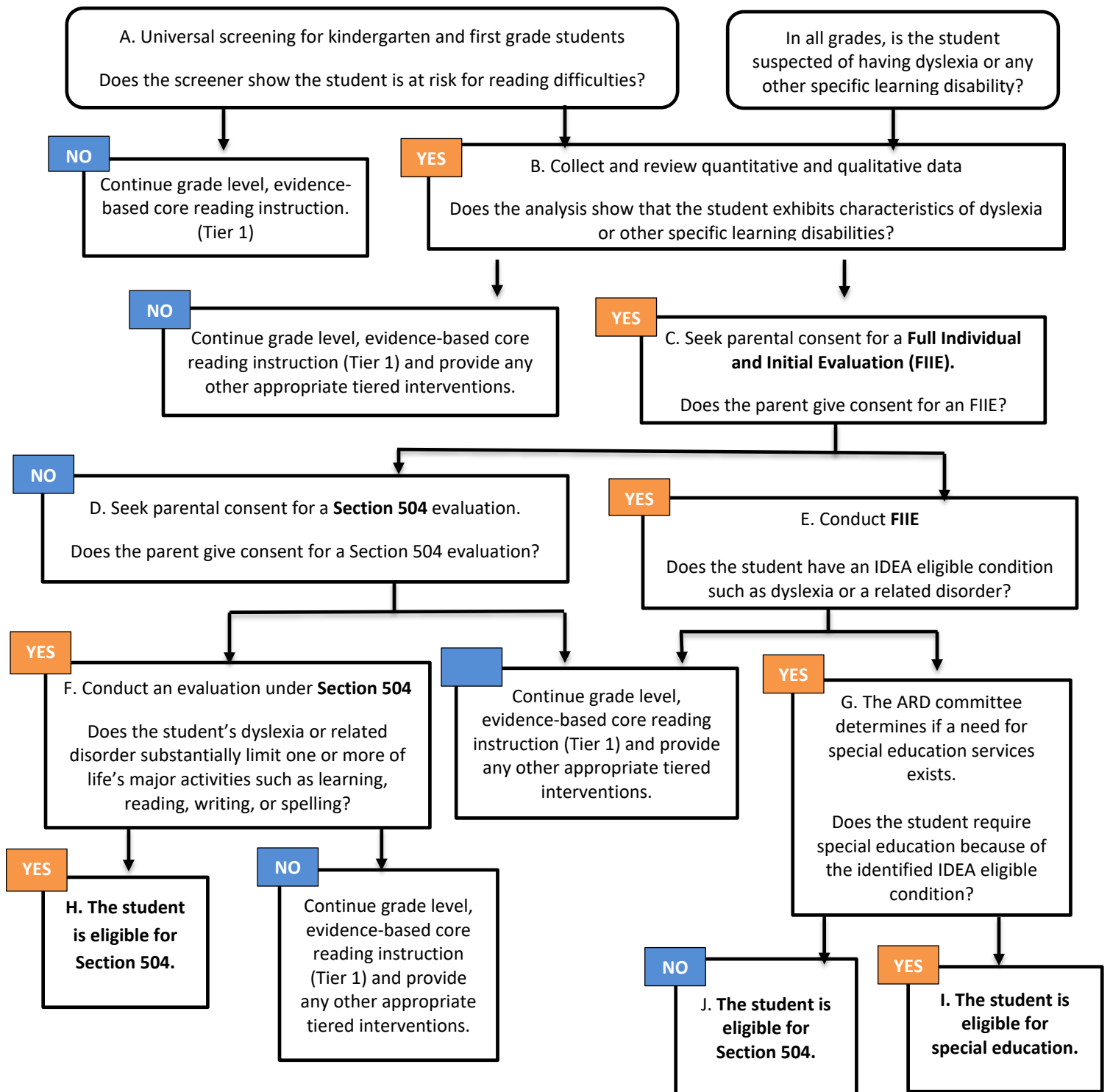
A student who is found not eligible under the IDEA, but who is identified with the condition of dyslexia through the FIIE process should not be referred for a second evaluation under Section 504. Instead, the Section 504 committee will use the FIIE and develop an appropriate plan for the student without delay.

For students eligible for Section 504, a Section 504 committee will develop the student’s Section 504 Plan, which must include appropriate reading instruction to meet the individual needs of the student.

Appropriate reading instruction includes the components and delivery of standard protocol dyslexia instruction identified in Chapter IV: Critical, Evidence-Based Components of Dyslexia Instruction. Revision of the Section 504 Plan will occur as the student’s response to instruction and to the use of accommodations, if any, is observed. Changes in instruction and/or accommodations must be supported by current data (e.g., classroom performance and dyslexia program monitoring).

Figure 3.8

Pathways for the Identification and Provision of Instruction for Students with Dyslexia



*See next page for additional detail.

Pathway to the Identification and Provision of Instruction for Students with Dyslexia

A. Universal Screening for reading and dyslexia is administered to all students in kindergarten and first grade as required by TEC §28.006 and §38.003(a).

B. If a student is at risk for reading difficulties or the student is suspected of having dyslexia or any other specific learning disability, collect and review quantitative and qualitative data on the student. See Figures 2.3 and 2.4 in Dyslexia Handbook for more information.

C. If the analysis shows that the student exhibits characteristics of dyslexia or other specific learning disabilities, seek parental consent for a Full Individual and Initial Evaluation (FIIE), while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions.

D. For students suspected of having dyslexia, if the parent does not give consent for an FIIE, seek parental consent for a Section 504 evaluation, while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions.

E. If the parent gives consent for an FIIE, conduct the FIIE within 45 school days (subject to limited exceptions) of the date of receipt of parent consent, while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions. The ARD committee (including the parent) must meet to review the results of the FIIE.

F. If the parent gives consent for a Section 504 evaluation, conduct an evaluation under Section 504 while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions.

G. If a student has an IDEA eligible condition such as dyslexia or a related disorder, the ARD committee determines if a need for special education services exists.

H. If the student's dyslexia or related disorder substantially limits one or more of life's major activities such as learning, reading, writing, or spelling, the student is eligible for Section 504, the 504 committee (parent participation is recommended) develops a Section 504 plan for the student to provide services including standard protocol dyslexia instruction, accommodations, and/or related aids specific to the student's disability.

I. If the student requires special education because of the identified IDEA eligible condition, the student is eligible for special education. The ARD committee develops the IEP for the student to receive specially designed instruction which can include **any appropriate special education and related services, and general education programs and services**, including standard protocol dyslexia instruction. While an IEP is individualized to the student, the IEP should address critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency. The determination of eligibility and the development of an IEP, if the student is eligible, must be done within 30 days (subject to limited exceptions) from the date that the written FIIE evaluation report is completed. Obtain parental consent for special education services.

J. If the parent declines, the LEA must still provide all general education services including any protections available under Section 504.

Reevaluation for Dyslexia Identification and Accommodations

Dyslexia is a lifelong condition. However, with proper help, many people with dyslexia can learn to read and write well. Early identification and treatment is the key to helping individuals with dyslexia achieve in school and in life.

—The International Dyslexia Association

<http://www.interdys.org/ewebeditpro5/upload/DyslexiaBasicsREVMay2012.pdf>

There are many initiatives, programs, evaluations, and data available for use in identification, placement, and program planning for students, including ELs, who struggle with dyslexia. Evaluation and ongoing progress monitoring are key components that must be considered by trained personnel.

A 2014 U.S. Department of Justice technical assistance document summarized regulations regarding testing accommodations for individuals with disabilities as follows.

The Americans with Disabilities Act (ADA) ensures that individuals with disabilities have the opportunity to fairly compete for and pursue such opportunities by requiring testing entities to offer exams in a manner accessible to persons with disabilities. When needed testing accommodations are provided, test-takers can demonstrate their true aptitude.

Sources for Procedures and Evaluation for Students Identified with Dyslexia

Berninger, V. W. & Wolf, B. (2009). *Teaching students with dyslexia and dysgraphia lessons from teaching and science*. Baltimore, MD: Paul H. Brookes Publishing.

Diehl, J. D., Frost, S. J., Mencl, W. E., & Pugh, K. R. (2011). Neuroimaging and the phonological deficit hypothesis. In S. Brady, D. Braze, & C. Fowler (Eds.), *In explaining individual difference in reading theory and evidence* (pp. 217–237). New York, NY: Psychology Press.

Elementary and Secondary Education Act as Reauthorized by the Every Student Succeeds Act of 2015. 20 U.S.C. § 2221(b). (2015).

Kilpatrick, D.A. (2015). *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*. Hoboken, NJ: John Wiley & Sons. (85-86).

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Region 18 Education Service Center. The Legal Framework for the Child-Centered Special Education Process. (2018). Retrieved from <http://framework.esc18.net/display/Webforms/LandingPage.aspx>.

Shaywitz, S.E. (2014) Testimony Before the Committee on Science, Space, and Technology, U.S. House of Representatives.

U.S. Department of Education. (2015). *Dyslexia Guidance*. Dear Colleague Letter from the Office of Special Education and Rehabilitative Services. Washington, D.C.

U.S. Department of Justice. (2014). ADA Requirements: Testing Accommodations. [Technical Assistance Document.] Civil Rights Division, Disability Rights Section. Retrieved online at https://www.ada.gov/regs2014/testing_accommodations.pdf.

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IV. Critical, Evidence-Based Components of Dyslexia Instruction

Although dyslexia affects individuals over the life span . . . reading skills can be increased with the right early intervention and prevention programs . . . It is clear from the consensus of scientifically based reading research that the nature of the educational intervention for individuals with reading disabilities and dyslexia is critical. (pp. 21–22)

— Birsh, J. R. Connecting Research and Practice, 2018

Effective literacy instruction is essential for all students and is especially critical for students identified with dyslexia. High-quality core classroom reading instruction can give students identified with dyslexia a foundation upon which intervention instruction can have a more significant impact.

Texas Education Code §38.003(b) states, “in accordance with the program approved by the State Board of Education, the board of trustees of each school district shall provide for the treatment of any student determined to have dyslexia or a related disorder.” SBOE rules in 19 TAC §74.28 require that each school must provide an identified student access at his/her campus to an instructional program that meets the requirements in SBOE rule and to the services of a teacher trained in dyslexia and related disorders. While the components of instruction for students with dyslexia include good teaching principles for all teachers, the explicitness and intensity of the instruction, fidelity to program descriptors, grouping formats, and training and skill of the teachers are wholly different from core classroom instruction and must be considered when making individual placement decisions.

Standard Protocol Dyslexia Instruction

For the student who has not benefited from the research-based core reading instruction, the components of instruction will include additional focused intervention as appropriate for the reading needs of the student with dyslexia. Standard protocol dyslexia instruction provides evidence-based, multisensory structured literacy instruction for students with dyslexia. A standard protocol dyslexia instructional program must be explicit, systematic, and intentional in its approach. This instruction is designed for all students with dyslexia and will often take place in a small group setting. Standard protocol dyslexia instruction must be—

- evidence-based and effective for students with dyslexia;
- taught by an appropriately trained instructor; and
- implemented with fidelity.

Instructional decisions for a student with dyslexia must be made by a committee (Section 504 or ARD) that is knowledgeable about the instructional components and approaches for students with dyslexia. It is important to remember that while dyslexia instruction is most successful when provided as early as possible, older children with reading disabilities will also benefit from focused and intensive remedial instruction.

In accordance with 19 TAC §74.28(e), districts must purchase or develop an evidence-based reading program for students with dyslexia and related disorders that incorporates **all** the components of instruction and instructional approaches described in the sections below. As is the case with any instructional program,

differentiation that does not compromise the fidelity of a program may be necessary to address different learning styles and ability levels and to promote progress among students receiving dyslexia instruction. While districts and charter schools must implement an evidence-based instructional program for students with dyslexia that meets each of the components described in this chapter, standard protocol dyslexia instruction provided to students may focus on components of the program that best meet the student's needs. For example, this may occur when a student with dyslexia who has participated in standard protocol dyslexia instruction in the past, but continues to need remediation in some, but not all of, the components (e.g. fluency, written expression).

Specially Designed Instruction

For students with dyslexia who have been determined eligible for and who are receiving special education services, specially designed instruction must also address the critical, evidence-based components described in this chapter. Specially designed instruction differs from standard protocol dyslexia instruction in that it offers a more individualized program specifically designed to meet a student's unique needs. Note that participation in standard protocol dyslexia instruction must be considered for all students, including those receiving dyslexia instruction under the IDEA. Standard protocol dyslexia instruction could be part of the specially designed instruction and services provided to meet the student's needs.

Critical, Evidence-Based Components of Dyslexia Instruction

- **Phonological awareness**—“Phonological awareness is the understanding of the internal sound structure of words. A phoneme is the smallest unit of sound in a given language that can be recognized as being distinct from other sounds. An important aspect of phonological awareness is the ability to segment spoken words into their component phonemes [phonemic awareness].” (Birsh, 2018, p. 26).
- **Sound-symbol association**—Sound-symbol association is the knowledge of the various speech sounds in any language to the corresponding letter or letter combinations that represent those speech sounds. The mastery of sound-symbol association (alphabetic principle) is the foundation for the ability to read (decode) and spell (encode) (Birsh, 2018, p. 26). “Explicit phonics refers to an organized program in which these sound symbol correspondences are taught systematically” (Berninger & Wolf, 2009, p. 53).
- **Syllabication**—“A syllable is a unit of oral or written language with one vowel sound. Instruction must include the six basic types of syllables in the English language; closed, open, vowel-consonant-e, r-controlled, vowel pair (or vowel team), and final stable syllable. Syllable division rules must be directly taught in relation to the word structure” (Birsh, 2018, p. 26).
- **Orthography**—Orthography is the written spelling patterns and rules in a given language. Students must be taught the regularity and irregularity of the orthographic patterns of a language in an explicit and systematic manner. The instruction should be integrated with phonology and sound-symbol knowledge.
- **Morphology**—“Morphology is the study of how morphemes are combined to form words. A morpheme is the smallest unit of meaning in the language” (Birsh, 2018, p. 26).
- **Syntax**—“Syntax is the set of principles that dictate sequence and function of words in a sentence in

order to convey meaning. This includes grammar, sentence variation, and the mechanics of language” (Birsh, 2018, p. 26).

- **Reading comprehension**—Reading comprehension is the process of extracting and constructing meaning through the interaction of the reader with the text to be comprehended and the specific purpose for reading. The reader’s skill in reading comprehension depends upon the development of accurate and fluent word recognition, oral language development (especially vocabulary and listening comprehension), background knowledge, use of appropriate strategies to enhance comprehension and repair it if it breaks down, and the reader’s interest in what he or she is reading and motivation to comprehend its meaning (Birsh, 2018, p.14; Snow, 2002).
- **Reading fluency**—“Reading fluency is the ability to read text with sufficient speed and accuracy to support comprehension”(Moats & Dakin, 2008, p. 52). Fluency also includes prosody. Teachers can help promote fluency with several interventions that have proven successful in helping students with fluency (e.g., repeated readings, word lists, and choral reading of passages) (Henry, 2010, p. 104).

In addition, other areas of language processing skills, such as written expression, which require integration of skills, are often a struggle for students with dyslexia. Moats and Dakin (2008) posit the following:

The ability to compose and transcribe conventional English with accuracy, fluency, and clarity of expression is known as basic writing skills. Writing is dependent on many language skills and processes and is often even more problematic for children than reading. Writing is a language discipline with many component skills that must be directly taught. Because writing demands using different skills at the same time, such as generating language, spelling, handwriting, and using capitalization and punctuation, it puts a significant demand on working memory and attention. Thus, a student may demonstrate mastery of these individual skills, but when asked to integrate them all at once, mastery of an individual skill, such as handwriting, often deteriorates. To write on demand, a student has to have mastered, to the point of being automatic, each skill involved (p. 55).

Both the teacher of dyslexia and the regular classroom teacher should provide multiple opportunities to support intervention and to strengthen these skills; therefore, responsibility for teaching reading and writing must be shared by classroom teachers, reading specialists, interventionists, and teachers of dyslexia programs.

Delivery of Dyslexia Instruction

While it is necessary that students are provided instruction in the above content, it is also critical that the way in which the content is delivered be consistent with research-based practices. Principles of effective intervention for students with dyslexia include **all** of the following:

- **Simultaneous, multisensory (VAKT)**—“Teaching is done using all learning pathways in the brain (visual, auditory, kinesthetic, tactile) simultaneously in order to enhance memory and learning” (Birsh, 2018, p. 26). “Children are actively engaged in learning language concepts and other information, often by using their hands, arms, mouths, eyes, and whole bodies while learning” (Moats & Dakin, 2008, p. 58).

- **Systematic and cumulative**—“Multisensory language instruction requires that the organization of material follow order of the language. The sequence must begin with the easiest concepts and most basic elements and progress methodically to more difficult material. Each step must also be based on [elements] already learned. Concepts taught must be systematically reviewed to strengthen memory” (Birsh, 2018, p. 26).
- **Explicit instruction**—“Explicit instruction is explained and demonstrated by the teacher one language and print concept at a time, rather than left to discovery through incidental encounters with information. Poor readers do not learn that print represents speech simply from exposure to books or print” (Moats & Dakin, 2008, p. 58). Explicit Instruction is “an approach that involves direct instruction: The teacher demonstrates the task and provides guided practice with immediate corrective feedback before the student attempts the task independently” (Mather & Wendling, 2012, p. 326).
- **Diagnostic teaching to automaticity**—“The teacher must be adept at prescriptive or individualized teaching. The teaching plan is based on careful and [continual] assessment of the individual’s needs. The content presented must be mastered to the degree of automaticity” (Birsh, 2018, p. 27). “This teacher knowledge is essential for guiding the content and emphasis of instruction for the individual student” (Moats & Dakin, 2008, p. 58). “When a reading skill becomes automatic (direct access without conscious awareness), it is performed quickly in an efficient manner” (Berninger & Wolf, 2009, p. 70).
- **Synthetic instruction**—“Synthetic instruction presents the parts of the language and then teaches how the parts work together to form a whole” (Birsh, 2018, p. 27).
- **Analytic instruction**—“Analytic instruction presents the whole and teaches how this can be broken into its component parts” (Birsh, 2018, p. 27).

As appropriate intervention is provided, students with dyslexia make significant gains in reading. Effective instruction is highly-structured, systematic, and explicit, and it lasts for sufficient duration. With regard to explicit instruction, Torgesen (2004) states, “Explicit instruction is instruction that does not leave anything to chance and does not make assumptions about skills and knowledge that children will acquire on their own” (p. 353).

In addition, because effective intervention requires highly structured and systematic delivery, it is critical that those who provide intervention for students with dyslexia be trained in the program used and that the program is implemented with fidelity.

Sources for Critical, Evidence-Based Components and Delivery of Dyslexia Instruction

- Berninger, V. W., & Wolf, B. (2009). *Teaching students with dyslexia and dysgraphia: Lessons from teaching and science*. Baltimore, MD: Paul H. Brookes Publishing.
- Birsh, J. R. (2018). Connecting research and practice. In J. R. Birsh, *Multisensory teaching of basic language skills* (4th ed., pp21–34). Baltimore, MD: Paul H. Brookes Publishing.
- Henry, M. K. (2010). *Unlocking literacy: Effective decoding and spelling instruction* (2nd ed.). Baltimore, MD: Paul H. Brookes Publishing.

The International Multisensory Structured Language Council. (2013). *Multisensory structured language programs: Content and principles of instruction*. Retrieved from <https://www.imslec.org/directory.asp?action=instruction>.

Mather, N., & Wendling, B. J. (2012). *Essentials of dyslexia assessment and intervention*. Hoboken, NJ: John Wiley & Sons.

Moats, L. C., & Dakin, K. E. (2008). *Basic facts about dyslexia and other reading problems*. Baltimore, MD: The International Dyslexia Association.

Providers of Dyslexia Instruction

In order to provide effective intervention, school districts are encouraged to employ highly trained individuals to deliver dyslexia instruction. Teachers, such as reading specialists, master reading teachers, general education classroom teachers, or special education teachers, who provide dyslexia intervention for students are not required to hold a specific license or certification. However, these educators must at a minimum have additional documented dyslexia training aligned to 19 TAC §74.28(c) and must deliver the instruction with fidelity. This includes training in critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency. In addition, they must deliver multisensory instruction that simultaneously uses all learning pathways to the brain, is systematic and cumulative, is explicitly taught, uses diagnostic teaching to automaticity, and includes both analytic and synthetic approaches. See pages 39 – 41 for a description of these components of instruction and delivery. A provider of dyslexia instruction does not have to be certified as a special educator when serving a student who also receives special education and related services if that provider is the most appropriate person to offer dyslexia instruction.

Although Texas does not have a certification requirement specific to teachers providing intervention to students with dyslexia, opportunities for those who provide dyslexia instruction to pursue a certification and/or license are available through several professional organizations as well as through the Texas Department of Licensing and Regulation. Certification and licensing options are outlined in Figure 4.1 below. More information concerning licensure in the State of Texas, may also be found in Texas Occupations Code, Chapter 403. (See Appendix C, State Laws and Rules Related to Dyslexia).

The effort to train professionals who work with students with dyslexia is also supported by The International Dyslexia Association (IDA) Position Statement: Dyslexia Treatment Programs (March, 2009), which states the following:

Professional practitioners, including teachers or therapists, should have had specific preparation in the prevention and remediation of language-based reading and writing difficulties. Teachers and therapists should be able to state and provide documentation of their credentials in the prevention and remediation of language-based reading and writing difficulties, including program-specific training recommended for the use of specific programs (pp. 1–2).

Providers of dyslexia instruction must be prepared to use the techniques, tools, and strategies outlined in the previous sections of this chapter. They may also serve as trainers and consultants in dyslexia and related disorders for regular, remedial, and special education teachers.

Figure 4.1. Training Requirements for Educators Providing Dyslexia Services

Dyslexia Certification/License	Licensing Body	Degree Required	Training Program	Course Contact Hours	Practicum Hours	Direct Observations	Certification Exam	Continuing Education Requirement
Educator certification* as appropriate	State Board for Educator Certification (SBEC)	Bachelors	Training which meets components of instruction and delivery	Varies with program	Varies with program	Varies with program	None	None
*Teachers, such as reading specialists, master reading teachers, general education classroom teachers, or special education teachers are not required to hold a specific license or certification to provide dyslexia intervention for students; however, they must at a minimum have additional documented dyslexia training aligned to 19 TAC §74.28(c) and must deliver the instruction with fidelity.								
Licensed Dyslexia Therapist (LDT)	Texas Department of Licensing and Regulation (TDLR)	Masters	IMSLEC Accredited or other MSLE Program	200	700	10	yes	20 hrs/2 yrs
Licensed Dyslexia Practitioner (LDP)	Texas Department of Licensing and Regulation (TDLR)	Bachelors	IMSLEC Accredited or other MSLE	45	60	5	yes	20 hrs/2 yrs
Certified Academic Language Therapist (CALT)	Academic Language Therapy Association (ALTA)	Bachelors	IMSLEC Accredited or other MSLE	200	700	10	yes	10 hrs/1 yr
Certified Academic Language Practitioner (CALP)	Academic Language Therapy Association (ALTA)	Bachelors	IMSLEC Accredited or other MSLE Program	45	60	5	yes	10 hrs/1 yr
Certified Structured Literacy/Dyslexia Specialist	Center for Effective Reading Instruction (CERI)	Bachelors	IDA Accredited	135	30	3	yes	10 hrs/1 yr
Certified Structured Literacy/Dyslexia Interventionist	Center for Effective Reading Instruction (CERI)	Bachelors	IDA Accredited	90	30	3	yes	10 hrs/1 yr
Wilson Level II Certification/Therapist	Wilson Language Training	Bachelors	IDA Accredited	200	215	11+	yes	50 hrs/5 yrs
Wilson Level I Certification/Practitioner	Wilson Language Training	Bachelors	IDA Accredited	105	65	5+	yes	50 hrs/5 yrs
AOGPE Fellow Level	Academy of Orton-Gillingham Practitioners and Educators (AOGPE)	Masters	AOGPE	250	600	13	no	none
AOGPE Certified Level	Academy of Orton-Gillingham Practitioners and Educators (AOGPE)	Bachelors	AOGPE	160	300	10	no	none
AOGPE Associate Level	Academy of Orton-Gillingham Practitioners and Educators (AOGPE)	Bachelors	AOGPE	Option A - 60 Option B - 70	Option A - 100 1 to 1 hours Option B - 50 1 to 1 hours; & 50 group hours	10	no	none

Please note that certification and licensing requirements may change with time. For more complete and up-to-date information, contact the specific licensing body.

[Professional Development Relative to Dyslexia for All Teachers](#)

Research consistently confirms the impact that a knowledgeable teacher can have on the success or failure of even the best reading programs (Shaywitz, 2003). To ensure that teachers are knowledgeable about dyslexia, [TEC §21.054\(b\)](#) and [19 TAC §232.11\(e\)](#) require educators who teach students with dyslexia to be

trained in new research and practices related to dyslexia as a part of their continuing professional education (CPE) hours.

<http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.21.htm>

<http://ritter.tea.state.tx.us/sbecrules/tac/chapter232/ch232a.html#232.11>

Educator Preparation Programs

According to TEC §21.044(b), all candidates completing an educator preparation program must receive instruction in detection and education of students with dyslexia. This legislation ensures that newly certified teachers will have knowledge of dyslexia prior to entering the classroom.

<https://statutes.capitol.texas.gov/Docs/ED/htm/ED.21.htm#21.044>

Instructional Intervention Consideration for English Learners with Dyslexia

English Learners (ELs) receiving dyslexia services will have unique needs. Provision of dyslexia instruction should be in accordance with the program model the student is currently receiving (e.g., dual language, transitional bilingual, ESL). Interventionists working with ELs should have additional training on the specialized needs of ELs.

Learning to read, write, and spell in two languages can be facilitated by building on a student’s native language knowledge and helping to transfer that knowledge to a second language. While direct, systematic instruction is still required for all aspects of reading, additional explicit instruction will be needed to address the similarities and differences in sounds, syllable structure, morphology, orthography, and syntax between the first and second languages.

For example, instructional considerations may include capitalizing on familiar sound-symbol correspondences. Direct and systematic instruction of the cross-linguistic correlations is beneficial for ELs. Instruction can subsequently include those sound-symbol correlations that partially overlap or present a slight variation from the native language to the second language. Unfamiliar phonemes and graphemes then can be presented to ELs. A systematic approach will enhance instruction and assist the bilingual student in transferring native language and literacy knowledge to second language and literacy acquisition.

For ELs learning to read in English and not in their native language, progress in reading may be hindered due to limited vocabulary in English. Therefore, in addition to all the components of effective instruction previously discussed, intervention for ELs also must emphasize oral language development (Cardenas-Hagan, 2018). Because the English language is derived from Anglo-Saxon, Latin, Greek, French, and other languages, ELs can expand their oral language and vocabulary knowledge by understanding the cognates (baseball/béisbol or leader/lider) that exist in their native language and English. The similarities of words in the native language and English must be explicitly taught.

It is also necessary to incorporate ESL strategies during the intervention process and in all content areas. In Texas, school districts are required to implement the English Language Proficiency Standards (ELPS) as an

integral part of each subject area in the required curriculum ([TAC §74.4\(a\)](#)). Dyslexia instruction for ELs must incorporate the ELPS. A few strategies to consider include the following:

- Establish routines so that ELs understand what is expected of them
- Provide native language support when giving directions or when students do not understand the task
- Provide opportunities for repetition and rehearsal so that the new information can be learned to mastery
- Adjust the rate of speech and the complexity of the language used according to the second language proficiency level of each student
- Provide extra time for the EL to process the English language. This is especially necessary during the early stages of second language development
- Provide extra time for the EL to formulate oral and written responses
- Emphasize text that includes familiar content and explain the structure of the text

Source for Instructional Intervention Consideration for English Learners (ELs) with Dyslexia

19 Texas Administrative Code §74.4, English Language Proficiency Standards. (2007).

Cardenas-Hagan, E. (2018). Language and literacy development among English language learners. In J. R. Birsh, *Multisensory teaching of basic language skills* (4th ed.) (pp. 720–754). Baltimore, MD: Paul H. Brookes Publishing.

Research-Based Best Practices

It is important to note that in Texas, the approach to teaching students with dyslexia is founded on research-based best practices. The ideas upon which the state’s approach is based are summarized here.

- Gains in reading can be significant if students with reading problems are provided systematic, explicit, and intensive reading instruction of sufficient duration in phonemic awareness, phonics, fluency, vocabulary (e.g., the relationships among words and the relationships among word structure, origin, and meaning), reading comprehension strategies, and writing.
- A failure to learn to read impacts a person’s life significantly. The key to preventing this failure for students with dyslexia is early identification and early intervention.
- Instruction by a highly skilled and knowledgeable educator who has specific preparation in the remediation of dyslexia is necessary.

It is vital to start evidence-based interventions as soon as possible. Effective treatments for dyslexia should consist of explicit academic teaching of reading and spelling skills.

The following research reflects the essential components of dyslexia instruction discussed above and may serve as additional sources of information for those working with students identified with dyslexia. The similarities between the state’s approach and the research are noted in bold. Unless otherwise indicated, the following pages contain excerpts from the resources cited.

1. August and Shanahan (2006, pp. 3–5) state the following:
 - **Instruction that provides substantial coverage in the key components of reading—identified by the National Reading Panel (NICHD, 2000) as phonemic awareness, phonics, fluency, vocabulary, and text comprehension**—has clear benefits for language-minority students.
 - **Instruction in the key components of reading** is necessary—but not sufficient—for teaching language-minority students to read and write proficiently in English. Oral proficiency in English is critical as well, but student performance suggests that it is often overlooked in instruction.
 - Oral proficiency and literacy in the first language can be used to facilitate literacy development in English.

August, D., & Shanahan, T. (Eds.). (2006). *Executive summary: Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth*. Mahwah, NJ: Lawrence Erlbaum.

2. Berninger and Wolf (2009, p. 49–50) state the following:

Until children are reading without effort, each reading lesson should consist of **teacher-directed, explicit, systematic instruction** in 1) phonological awareness; 2) applying phonics (alphabetic principle) and morphology to decoding; 3) applying background knowledge already learned to unfamiliar words or concepts in material to be read (activating prior knowledge); 4) both oral reading and silent reading, with appropriate instructional materials; 5) activities to develop oral reading fluency; and 6) reading comprehension.

Berninger, V. W., & Wolf, B. J. (2009). *Teaching students with dyslexia and dysgraphia: Lessons from teaching and science*. Baltimore, MD: Paul H. Brookes Publishing.

3. Birsh (2018, p. 3) states the following:

Teachers need to undergo extensive **preparation in the disciplines inherent in literacy**, which include the following:

- Language development
- **Phonology and phonemic awareness**
- Alphabetic knowledge
- Handwriting
- **Decoding (reading)**
- **Spelling (encoding)**
- **Fluency**
- **Vocabulary**
- **Comprehension**
- Composition

- Testing and assessment
- Lesson planning
- Behavior management
- Study skills
- History of the English language
- Technology
- Needs of older struggling students

Birsh, J. R. (2018). Connecting research and practice. In J. R. Birsh, *Multisensory teaching of basic language skills* (4th ed., pp. 2–34). Baltimore, MD: Paul H. Brookes Publishing.

4. Clark and Uhry (2004, pp. 89–92) state the following:

- Children with dyslexia need the following:
 - **Direct, intensive, and systematic** input from and interaction with the teacher
 - Immediate feedback from the teacher
 - Careful pacing of instruction
 - **Systematic** structured progression from the simple to the complex
- Other components of instruction include the following:
 - Learning to mastery
 - Multisensory instruction

Clark, D., & Uhry, J. (Eds.). (2004). *Dyslexia: Theory and practice of instruction* (3rd ed.). Austin, TX: Pro-Ed.

5. Henry (2010, p. 21) states the following:

By teaching the concepts inherent in the word origin and word structure model across a decoding-spelling continuum from the early grades through at least eighth grade, and by using technology when it serves to reinforce these concepts, teachers ensure that students have strategies to decode and spell most words in the English language. This framework and continuum readily organize a large body of information for teachers and their students. Not only do students gain a better understanding of English word structure, but they also become better readers and spellers.

Henry, M. K. (2010). *Unlocking literacy: Effective decoding and spelling instruction* (2nd ed.). Baltimore, MD: Paul H. Brookes Publishing.

6. Mather and Wendling (2012, p. 171) state the following:

Individuals with dyslexia need to

- understand how phonemes (sounds) are represented with graphemes (letters);
- learn how to blend and segment phonemes to pronounce and spell words;
- learn how to break words into smaller units, such as syllables, to make them easier to pronounce;
- learn to recognize and spell common orthographic graphic patterns (e.g., -tion);
- learn how to read and spell words with irregular elements (e.g., ocean); and
- spend time engaged in meaningful reading and writing activities.

Mather, N. M., & Wendling, B. J. (2012). *Essentials of dyslexia assessment and intervention*. Hoboken, NJ: John Wiley & Sons.

7. Moats (1999, pp. 7–8) states that

Well designed, controlled comparisons of instructional approaches have consistently supported these components and practices in reading instruction:

- **direct teaching** of decoding, comprehension, and literature appreciation;
- **phoneme awareness** instruction;
- **systematic and explicit instruction** in the code system of written English;
- daily exposure to a variety of texts, as well as incentives for children to read independently and with others;
- **vocabulary** instruction that includes a variety of complementary methods designed to explore the relationships among words and the relationships among word structure, origin, and meaning;
- **comprehension** strategies that include prediction of outcomes, summarizing, clarification, questioning, and visualization; and
- frequent **writing** of prose to enable a deeper understanding of what is read.

Moats, L. C. (1999). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do* (Item No. 39-0372). Washington, DC: American Federation of Teachers.

8. Moats (1999, pp. 7– 20) states the following:

The **knowledge and skills needed to teach reading** include the following:

- The psychology of reading and reading development
 - Basic facts about reading
 - Characteristics of poor and novice readers
 - Environmental and physiological factors in reading development
 - How reading and spelling develop

- Knowledge of the language structure
 - **Phonology**
 - **Phonetics**
 - **Morphology**
 - **Orthography**
 - **Semantics**
 - **Syntax and text structure**
- Practical skills of instruction—use of validated instructional practices
- Assessment of classroom reading and writing skills

Moats, L. C. (1999). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do* (Item No. 39-0372). Washington, DC: American Federation of Teachers.

9. The National Reading Panel's (2000) *Report of the National Reading Panel* highlights the following:

Emphasis is placed on the importance of **identifying early** which children are at risk for reading failure and **intervening quickly** to help them.

How reading is taught matters—reading instruction is most effective when it is taught **comprehensively, systematically, and explicitly**.

National Reading Panel. (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, DC: National Institute of Child Health and Human Development.

10. Shaywitz (2005, pp. 257–262) outlines the following essentials for a successful reading intervention and effective early intervention program:

Essentials of a successful reading intervention include the following:

- **Early intervention**—The best intervention begins in kindergarten with remediation beginning in first grade.
- **Intense instruction**—Reading instruction must be delivered with great intensity. Optimally, a child who is struggling to read should be given instruction in a group of three and no larger than four students, and the child should receive this focused reading instruction at least four, and preferably five, days a week.
- **High-quality instruction**—High-quality instruction is provided by a highly qualified teacher. Recent studies highlight the difference that a teacher can make in the overall success or failure of a reading program.
- **Sufficient duration**—One of the most common errors in teaching a student with dyslexia to read is to withdraw prematurely the instruction that seems to be working. A child who is reading accurately but not fluently at grade level still requires intensive reading instruction.

Essentials of an effective **early intervention** program include the following:

- Systematic and direct instruction in the following:
 - **Phonemic awareness**—noticing, identifying, and manipulating the sounds of spoken language
 - **Phonics**—how letters and letter groups represent the sounds [of] spoken language
 - Sounding out words (decoding)
 - Spelling
 - Reading sight words
 - **Vocabulary** and concepts
 - **Reading comprehension** strategies
- Practice in applying the above skills in reading and in writing
- **Fluency** training
- Enriched language experiences: listening to, talking about, and telling stories

Shaywitz, S. (2003). *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. New York, NY: Alfred A. Knopf.

11. Torgesen (2004, p. 376) states the following:

The first implication for practice and educational policy is that schools must work to provide **preventive interventions** to eliminate the enormous reading practice deficits that result from prolonged reading failure. The second implication is that schools must find a way to provide interventions for older children with reading disabilities that are appropriately focused and sufficiently intensive.

Torgesen, J. K. (2004). Lessons learned from research on interventions for students who have difficulty learning to read. In P. McCardle, & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 355–382). Baltimore, MD: Paul H. Brookes Publishing.

12. Vaughn and Linan-Thompson (2003, pp. 299–320) state the following:

- Mounting evidence suggests that most students with reading problems can make significant gains in reading if provided **systematic, explicit, and intensive** reading instruction based on critical elements associated with improved reading such as **phonemic awareness, phonics, fluency in word recognition and text reading, and comprehension**.
- There were no statistically significant differences between students receiving intervention instruction in a teacher-to-student ratio of 1:1 or 1:3 though both groups outperformed students in a 1:10 teacher to student ratio.
- Student progress determined the length of intervention.

Vaughn, S., & Linan-Thompson, S. (2003). Group size and time allotted to intervention. In B. Foorman (Ed.), *Preventing and remediating reading difficulties* (pp. 275–320). Parkton, MD: York Press.

13. The International Dyslexia Association (2009, pp. 1–2) states the following:

Professional practitioners, including **teachers or therapists, should have had specific preparation in the prevention and remediation of language-based reading and writing difficulties**. Teachers and therapists should be able to state and provide documentation of their credentials in the prevention and remediation of language-based reading and writing difficulties, including program-specific training recommended for the use of specific programs.

The International Dyslexia Association. (2009, March). *Position statement: Dyslexia treatment programs*.

14. The International Dyslexia Association’s *Knowledge and Practice Standards for Teachers of Reading* provides **standards for teachers** of students with dyslexia.

The International Dyslexia Association. (2010). *Knowledge and practice standards for teachers of reading*.

15. The International Multisensory Structured Language Education Council (IMSLEC) provides accreditation in quality training courses for the professional preparation of multisensory **structured language education specialists**.

International Multisensory Structured Language Education Council (IMSLEC): <http://www.imslec.org>

Ineffective Treatment for Dyslexia

Interventions that claim to treat dyslexia in the absence of print are generally ineffective. Claims of ineffective treatments for dyslexia may use terms or techniques described as “brain training,” “crossing the midline,” “balance therapy,” and others. While some treatments may ameliorate conditions other than dyslexia, their use for students with dyslexia has not been proven effective. Figure 4.2 addresses some commonly advertised interventions that may be purported to treat dyslexia, but scientific, peer-reviewed research has demonstrated ineffective results for students with dyslexia.

Figure 4.2. Treatments Ineffective for Dyslexia

Examples	What Research Has Found	Citation
Colored Overlays and Colored Lenses	“Consistent with previous reviews and advice from several professional bodies, we conclude that the use of coloured overlays to ameliorate reading difficulties cannot be endorsed and that any benefits reported in clinical settings are likely to be the result of placebo, practice, or Hawthorne effects.”	Griffiths, P.G., Taylor, R.H., Henderson, L.M., & Barrett, B.T. (2016). The effect of coloured overlays and lenses on reading: a systematic review of the literature. <i>Ophthalmic & Physiological Optics</i> , 36, 519–544. https://doi.org/10.1111/opo.12316
Specialized fonts designed for people with dyslexia	“Dyslexie font did not lead to improved reading compared to normal ‘Arial’ font, nor was it preferred by most students.”	Kuster, S. M., van Weerdenburg, M., Gompel, M., & Bosman, A. M. (2018). Dyslexie font does not benefit reading in children with or without dyslexia. <i>Annals of Dyslexia</i> , 68, 25-42. https://doi.org/10.1007/s11881-017-0154-6
Vision Therapy	“Scientific evidence does not support the claims that visual training, muscle exercises, ocular pursuit-and-tracking exercises, behavioral/perceptual vision therapy, ‘training’ glasses, prisms, and colored lenses and filters are effective direct or indirect treatments for learning disabilities. There is no valid evidence that children who participate in vision therapy are more responsive to educational instruction than children who do not participate.”	Handler, S.M., Fierson, W.M., et al. (2011). Joint technical report - learning disabilities, dyslexia, and vision. <i>Pediatrics</i> , 127, e818-56. https://doi.org/10.1542/peds.2010-3670
Specific Working Memory Training Programs	“The authors conclude that working memory training programs appear to produce short-term, specific training effects that do not generalize to measures of ‘real-world’ cognitive skills. These results seriously question the practical and theoretical importance of current computerized working memory programs as methods of training working memory skills.”	Melby-Lervåg, M., Redick, T. & Hulme, C. (2016). Working memory training does not improve performance on measures of intelligence or other measures of “far transfer”: Evidence from a meta-analytic review. <i>Perspectives on Psychological Science</i> , 11, 512-534. https://DOI:10.1177/1745691616635612

Instructional Accommodations for Students with Disabilities

Students with dyslexia who receive dyslexia instruction that contains the components described in this chapter will be better equipped to meet the demands of grade-level or course instruction. In addition to dyslexia instruction, accommodations provide the student with dyslexia effective and equitable access to grade-level or course instruction in the general education classroom. **Accommodations are not one size fits all; rather, the impact of dyslexia on each individual student determines the necessary accommodation.**

Listed below are **examples** of reasonable classroom accommodations:

- Copies of notes (e.g., teacher- or peer-provided)
- Note-taking assistance
- Additional time on class assignments and tests
- Reduced/shortened assignments (e.g., chunking assignments into manageable units, fewer items given on a classroom test or homework assignment without eliminating concepts, or student planner to assist with assignments)
- Alternative test location that provides a quiet environment and reduces distractions
- Priority seating assignment
- Oral reading of directions or written material
- Word banks
- Audiobooks
- Text to speech
- Speech to text
- Electronic spellers
- Electronic dictionaries
- Formula charts
- Adaptive learning tools and features in software programs

Accommodations are changes to materials, actions, or techniques, including the use of technology, that enable students with disabilities to participate meaningfully in grade-level or course instruction. The use of accommodations occurs primarily during classroom instruction as educators use various instructional strategies to meet the needs of each student. A student may need an accommodation only temporarily while learning a new skill, or a student might require the accommodation throughout the school year and over several years including beyond graduation.

Decisions about which accommodations to use are very individualized and should be made for each student by that student's ARD or Section 504 committee, as appropriate. Students can, and should, play a significant role in choosing and using accommodations. Students need to know what accommodations are possible, and then, based on knowledge of their personal strengths and limitations, they select and try accommodations that might be useful for them. The more input students have in their own accommodation choices, the more likely it is that they will use and benefit from the accommodations.

When making decisions about accommodations, instruction is always the foremost priority. Not all accommodations used in the classroom are allowed during a state assessment. However, an educator's ability to meet the individual needs of a student with dyslexia or provide support for the use of an accommodation should not be limited by whether an accommodation is allowable on a state assessment.

In order to make accommodation decisions for students, educators should have knowledge of the Texas Essential Knowledge and Skills (TEKS) and how a student performs in relation to them. Educators should also collect and analyze data pertaining to the use and effectiveness of accommodations (e.g., assignment/test scores with and without the accommodation, observational reports from parents and teachers) so that informed educational decisions can be made for each student. By analyzing data, an educator can determine if the accommodation becomes inappropriate or unnecessary over time due to the student's changing needs. Likewise, data can confirm for the educator that the student still struggles in certain areas and should continue to use the accommodation.

For more information about accommodations, see [Accommodations for students with Disabilities](#) available at <https://dyslexiaida.org/accommodations-for-students-with-dyslexia/>.

Access to Instructional Materials for Students with Disabilities

Accessible instructional materials (AIM) are textbooks and related core instructional materials that have been converted into specialized formats (e.g., Braille, audio, digital text, or large print) for students who are blind or have low vision, have a physical disability, or have a reading disability such as dyslexia. Digital books or text-to-speech functions on computers and mobile devices provide access to general education curriculum for students with dyslexia. **Bookshare** and **Learning Ally** provide electronic access to digitally recorded materials for students with print disabilities. TEA provides links to these resources as well as other accessible instructional materials for students with disabilities at <http://www.tea.state.tx.us/index2.aspx?id=2147487109>.

Texas State Student Assessment Program Accommodations for Students with Disabilities

Educators, parents, and students must understand that accommodations provided during classroom instruction and testing might differ from accommodations allowed for use on state assessments. The state assessment is a standardized tool for measuring every student's learning in a reliable, valid, and secure manner. An accommodation used in the classroom for learning may invalidate or compromise the security and integrity of the state assessment; therefore, not all accommodations suitable for instruction are allowed during the state assessments. It is important to keep in mind that the policies for accommodation use on state assessments **should not** limit an educator's ability to develop individualized materials and techniques to facilitate student learning. **Instruction comes first** and can be customized to meet the needs of each student.

For the purposes of the statewide assessments, students needing accommodations due to a disability include the following:

- Students with an identified disability who receive special education services and meet established eligibility criteria for certain accommodations
- Students with an identified disability who receive Section 504 services and meet established eligibility criteria for certain accommodations
- Students with a disabling condition who do not receive special education or Section 504 services but meet established eligibility criteria for certain accommodations

For students who receive special education or Section 504 services, the decision for student use of accommodations during the statewide assessments is made by the ARD or Section 504 committee. In those

rare instances where a student does not receive services but meets the eligibility criteria due to a disabling condition, the decision about using accommodations on the statewide assessments is made by the appropriate team of people at the campus level, such as the RTI team or student assistance team. For more information about accommodations on statewide assessments, visit <https://tea.texas.gov/accommodations/>.

Enrollment in Gifted/Talented and Advanced Academic Programs

A student who has been identified with dyslexia can also be a gifted learner, or a twice-exceptional learner. A twice-exceptional learner is a child or youth who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment and who exhibits high-performance capability in an intellectual, creative, or artistic area; possesses an unusual capacity for leadership; or excels in a specific academic field and who also gives evidence of one or more disabilities as defined by federal or state eligibility criteria. Disability criteria may include the following:

- Learning disabilities
- Speech and language disorders
- Emotional/behavioral disorders
- Physical disabilities
- Traumatic brain injury
- Autism spectrum disorder
- Sensory disabilities (hearing impaired, visually impaired, blind-deaf)
- Other health impairments that limit strength, vitality, or alertness (such as ADHD)

Twice-exceptional students make up a highly diverse group of learners. While they do not form a simple, homogenous group, there are indicators that tend to be typical of many children who are both gifted and who also have a disability. Cognitive and affective indicators may include strengths such as extreme curiosity and questioning, high levels of problem-solving and reasoning skills, and advanced ideas/opinions which they are uninhibited about expressing. Cognitive and affective challenges twice-exceptional learners may exhibit include discrepant verbal and performance abilities, deficient or extremely uneven academic skills, and auditory and/or visual processing problems which may cause them to respond or work slowly or appear to think slowly. For more information regarding general characteristics of twice-exceptional learners, please see www.gtequity.org/twice/docs/generalcharacteristics.pdf on TEA's Equity in G/T Education website.

Due to the diversity of twice-exceptional students, the identification of twice-exceptional learners can be challenging. Evaluation and identification require those vested in the education of these learners to be knowledgeable of the unique characteristics and behaviors demonstrated by twice-exceptional learners. Often the disability masks the giftedness, emphasizing barriers to learning instead of the potential that the learner has as a result of the gifted attributes. Conversely, the giftedness may mask the disability, which may result in the student experiencing gaps in learning compounded by the disability, thus affecting how the learner perceives his or her abilities.

Twice-exceptional students must be provided access to all service and course options available to other students. Section 504 and Title II of the Americans with Disabilities Act (ADA), require that qualified students with disabilities be given the same opportunities to compete for and benefit from accelerated programs and classes as are given to students without disabilities [34 C.F.R. §104.4(b)(1)(ii) and 28 C.F.R. §35.130(b)(1)(ii)].

A student with a disability such as dyslexia or a related disorder may not be denied admission to an accelerated or advanced class or program solely because of the student’s need for special education or related aids or services or because the student has an IEP or Section 504 Plan.

Additionally, a student with a disability may not be prohibited from using special education or related aids as a condition of participating in an accelerated or advanced class or program. Participation by a student with a disability in an accelerated or advanced class or program generally would be considered part of the regular education referenced in IDEA and Section 504 regulations. Thus, if a qualified student with a disability requires related aids and services to participate in a regular education class or program, the school cannot deny that student the needed related aids and services in an accelerated or advanced class or program. It is important to note that a district or school does not have to provide a student with an accommodation or modification “that fundamentally alters the nature of” an accelerated or advanced course or program. Rather, a district or school “must consider a student’s ability to participate in the program with reasonable accommodations.” (*G.B.L. v. Bellevue School District #405*).

In determining the appropriate courses and programs, the following questions should be considered by a twice-exceptional learner’s ARD or Section 504 committee:

- Does the student meet the basic eligibility or admission requirements applied to ALL students?
- Does the student need special education or related aids and services to receive FAPE?
- Do the academic accommodations or related aids and services constitute a fundamental alteration of the program?

The U.S. Department of Education’s Office for Civil Rights offers information for addressing students with disabilities seeking enrollment in advanced academic programs such as Advanced Placement and International Baccalaureate courses. For more information, see the Dear Colleague Letter regarding Access by Students with Disabilities to Accelerated Programs at <https://www2.ed.gov/about/offices/list/ocr/letters/colleague-20071226.html>.

Additional support, information, and resources are available through the Equity in Gifted/Talented (G/T) Education website at www.gtequity.org/index.php. The *Texas State Plan for the Education of Gifted/Talented Students*, available at www.tea.state.tx.us/index2.aspx?id=6420, mandates that once any student is identified as gifted, he/she must be provided gifted/talented services that are commensurate with his/her abilities (1.4C, 1.6C, 2.1C, and 3.3C). Additionally, due to the disability, twice-exceptional learners should have an IEP through special education services or a Section 504 Plan through general education. Additional support for districts serving twice-exceptional students is available at www.gtequity.org/twice.php.

Sources for Enrollment in Gifted/Talented and Advanced Academic Programs

G.B.L. v. Bellevue Sch. Dist. #405. IDELR 186. No. 2:2012cv00427. (U.S. District Court, W.D. Washington, 2013).

Texas Education Agency. (2008–2015). Equity in G/T Education: Twice-Exceptional Students and G/T Services. Retrieved from <http://www.gtequity.org>.

Texas State Board of Education. (2009). *Texas State Plan for the Education of Gifted/Talented Students*. Retrieved from https://tea.texas.gov/Academics/Special_Student_Populations/Gifted_and_Talented_Education/Gifted_Talented_Education/.

U.S. Department of Education, Office for Civil Rights. Dear Colleague Letter regarding Access by Students with Disabilities to Accelerated Programs. (December 26, 2007). Retrieved from <https://www2.ed.gov/about/offices/list/ocr/letters/colleague-20071226.html>.

V. Dysgraphia

Texas state law requires districts and charter schools to identify students who have dyslexia and related disorders. Texas Education Code §38.003 identifies the following examples of related disorders: developmental auditory imperception, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability. Recent research in the field of dysgraphia has prompted the addition of the following guidance regarding the evaluation, identification, and provision of services for students with dysgraphia.

Definition and Characteristics of Dysgraphia

Difficulty with handwriting frequently occurs in children with dyslexia. When Texas passed dyslexia legislation, the co-existence of poor handwriting with dyslexia was one reason why dysgraphia was called a related disorder. Subsequently, dyslexia and dysgraphia have been found to have diverse co-morbidities, including phonological awareness (Döhla and Heim, 2016). However, dyslexia and dysgraphia are now recognized to be distinct disorders that can exist concurrently or separately. They have different brain mechanisms and identifiable characteristics.

Dysgraphia is related to dyslexia as both are language-based disorders. In dyslexia, the impairment is with word-level skills (decoding, word identification, spelling). Dysgraphia is a written language disorder in serial production of strokes to form a handwritten letter. This involves not only motor skills but also language skills—finding, retrieving and producing letters, which is a subword-level language skill. The impaired handwriting may interfere with spelling and/or composing, but individuals with only dysgraphia do not have difficulty with reading (Berninger, Richards, & Abbott, 2015).

A review of recent evidence indicates that dysgraphia is best defined as a neurodevelopmental disorder manifested by illegible and/or inefficient handwriting due to difficulty with letter formation. This difficulty is the result of deficits in graphomotor function (hand movements used for writing) and/or storing and retrieving orthographic codes (letter forms) (Berninger, 2015). Secondary consequences may include problems with spelling and written expression. The difficulty is not solely due to lack of instruction and is not associated with other developmental or neurological conditions that involve motor impairment.

The characteristics of dysgraphia include the following:

- Variably shaped and poorly formed letters
- Excessive erasures and cross-outs
- Poor spacing between letters and words
- Letter and number reversals beyond early stages of writing
- Awkward, inconsistent pencil grip
- Heavy pressure and hand fatigue
- Slow writing and copying with legible or illegible handwriting (Andrews & Lombardino, 2014)

Additional consequences of dysgraphia may also include:

- Difficulty with unedited written spelling
- Low volume of written output as well as problems with other aspects of written expression

Dysgraphia is not:

- Evidence of a damaged motor nervous system
- Part of a developmental disability that has fine motor deficits (e.g., intellectual disability, autism, cerebral palsy)
- Secondary to a medical condition (e.g., meningitis, significant head trauma, brain trauma)
- Association with generalized developmental motor or coordination difficulties (Developmental Coordination Disorder)
- Impaired spelling or written expression with typical handwriting (legibility and rate) (Berninger, 2004)

Dysgraphia can be due to:

- Impaired feedback the brain is receiving from the fingers
- Weaknesses using visual processing to coordinate hand movement and organize the use of space
- Problems with motor planning and sequencing
- Difficulty with storage and retrieval of letter forms (Levine, 1999)

Despite the widespread beliefs that handwriting is purely a motor skill or that only multisensory methods are needed to teach handwriting, multiple language processes are also involved in handwriting. Handwriting draws on language by hand (letter production), language by ear (listening to letter names when writing dictated letters), language by mouth (saying letter names), and language by eye (viewing the letters to be copied or reviewing for accuracy the letters that are produced from memory) (Berninger & Wolf, 2016).

Sources for Definition and Characteristics of Dysgraphia

Andrews, J. and Lombardino, L. (2014). Strategies for teaching handwriting to children with writing disabilities. *ASHA SIG1 Perspectives on Language Learning Education*. 21:114-126.

Berninger, V.W. (2004). Understanding the graphia in dysgraphia. In *Developmental Motor Disorders: A Neuropsychological Perspective*. D. Dewry and D. Tupper (Eds.), New York, NY, US: Guilford Press.

Berninger, V.W. (2015). *Interdisciplinary frameworks for schools: Best practices for serving the needs of all student*. Washington, D.C.: American Psychological Association.

Berninger, V.W., Richards, T.L. and Abbott, R. D. (2015) *Differential Diagnosis of Dysgraphia, Dyslexia, and OWL LD: Behavioral and Neuroimaging Evidence*. *Read Writ*. 2015 Oct;28(8):1119-1153.

Berninger, V., & Wolf, B. (2016). *Dyslexia, Dysgraphia, OWL LD, and Dyscalculia: Lessons from Science and Teaching* (Second ed.). Baltimore, Maryland: Paul H Brookes Publishing.

Döhla, D. and Heim, S. (2016). *Developmental dyslexia and dysgraphia: What can we learn from the one about the other?* *Frontiers in Psychology*. 6:2045.

Levine, M.D. (1999). *Developmental Variation and Learning Disorders*. Cambridge, MA: Educators Publishing Service, Inc.

Procedures for Identification

The process of identifying dysgraphia will follow Child Find procedures for conducting a full individual and initial evaluation (FIE) under the IDEA. These procedural processes require coordination among the teacher, campus administrators, diagnosticians, and other professionals as appropriate when factors such as a student's English language acquisition, previously identified disability, or other special needs are present.

The first step in the evaluation process, data gathering, should be an integral part of the district's or charter school's process for any student exhibiting learning difficulties. Documentation of the following characteristics of dysgraphia could be collected during the data gathering phase:

- Slow or labored written work
- Poor formation of letters
- Improper letter slant
- Poor pencil grip
- Inadequate pressure during handwriting (too hard or too soft)
- Excessive erasures
- Poor spacing between words
- Poor spacing inside words
- Inability to recall accurate orthographic patterns for words
- "b" and "d" reversals beyond developmentally appropriate time
- Inability to copy words accurately
- Inability of student to read what was previously written
- Overuse of short familiar words such as "big"
- Avoidance of written tasks
- Difficulty with visual-motor integrated sports or activities

While schools must follow federal and state guidelines, they must also develop procedures that address the needs of their student populations. Schools shall recommend evaluation for dysgraphia if the student demonstrates the following:

- Impaired or illegible handwriting that is unexpected for the student's age/grade
- Impaired handwriting that interferes with spelling, written expression, or both that is unexpected for the student's age/grade

1. Data Gathering

Schools collect data on all students to ensure that instruction is appropriate and scientifically based. Essential components of comprehensive literacy instruction, including writing, are defined in Section 2221(b) of ESSA as explicit instruction in writing, including opportunities for children to write with clear purposes, with critical reasoning appropriate to the topic and purpose, and with specific instruction and feedback from instructional staff.

Any time from kindergarten through grade 12 a student continues to struggle with one or more components of writing, schools must collect additional information about the student. Schools should use previously

collected as well as current information to evaluate the student’s academic progress and determine what actions are needed to ensure the student’s improved academic performance. The collection of various data, as indicated in Figure 5.1 below, will provide information regarding factors that may be contributing to or primary to the student’s struggles with handwriting, spelling, and written expression.

Cumulative Data

The academic history of each student will provide the school with the cumulative data needed to ensure that underachievement in a student suspected of having dysgraphia is not due to lack of appropriate instruction in handwriting, spelling, and written expression. This information should include data that demonstrate that the student was provided appropriate instruction and include data-based documentation of repeated evaluations of achievement at reasonable intervals (progress monitoring), reflecting formal evaluation of student progress during instruction. This cumulative data also include information from parents/guardians. Sources and examples of cumulative data are provided in Figure 5.1.

Figure 5.1. Sources and Examples of Cumulative Data	
<ul style="list-style-type: none"> • Vision screening • Teacher reports of classroom concerns • Parent reports of concerns about handwriting, spelling, or written expression • Classroom handwriting assessments • Classroom spelling assessments • Samples of written work (e.g., journal, story responses, writing samples, etc.) • Accommodations or interventions provided • Academic progress reports (report cards) • Gifted/talented assessments • Samples of written schoolwork (both timed and untimed) 	<ul style="list-style-type: none"> • State student assessment program results as described in TEC §39.022 • Observations of instruction provided to the student • Full Individual and Initial Evaluation • Outside evaluations • Speech and language assessment • School attendance • Curriculum-based assessment measures • Instructional strategies provided and student’s response to the instruction • Universal screening • Parent survey

2. Formal Evaluation

After data gathering, the next step in the process is formal evaluation. This is not a screening; rather, it is an individualized evaluation used to gather evaluation data. Formal evaluation includes both formal and informal data. All data will be used to determine whether the student demonstrates a pattern of evidence for dysgraphia. Information collected from the parents/guardians also provides valuable insight into the student’s early years of written language development. This history may help to explain why students come to the evaluation with many different strengths and weaknesses; therefore, findings from the formal evaluation will be different for each child. Professionals conducting evaluations for the identification of dysgraphia will need to look beyond scores on standardized assessments alone and examine the student’s classroom writing performance, educational history, and early language experiences to assist with determining handwriting, spelling, and written expression abilities and difficulties.

Notification and Permission

When formal evaluation is recommended, the school completes the evaluation process as outlined in IDEA. Procedural safeguards under the IDEA must be followed. For more information on procedural safeguards,

see Appendix D, IDEA/Section 504 Side-by-Side Comparison, and TEA's [Parent Guide to the Admission, Review, and Dismissal Process \(Parent's Guide\)](#) and [Notice of Procedural Safeguards](#)

Tests and Other Evaluation Materials

Test instruments and other evaluation materials must meet the following criteria:

- Be used for the purpose for which the evaluation or measures are valid or reliable
- Include material tailored to assess specific areas of educational need and not merely materials that are designed to provide a single general intelligence quotient
- Be selected and administered to ensure that, when a test is given to a student with impaired sensory, manual, or speaking skills, the test results accurately reflect the student's aptitude, achievement level, or whatever other factor the test purports to measure, rather than reflecting the student's impaired sensory, manual, or speaking skills
- Be selected and administered in a manner that is not racially or culturally discriminatory
- Include multiple measures of a student's writing abilities such as informal assessment information (e.g., anecdotal records, district universal screenings, progress monitoring data, criterion-referenced evaluations, samples of written work, classroom observations)
- Be administered by trained personnel and in conformance with the instructions provided by the producer of the evaluation materials
- Be provided and administered in the student's native language or other mode of communication and in the form most likely to yield accurate information regarding what the child can do academically, developmentally, and functionally, unless it is clearly not feasible to provide or administer

Domains to Assess

Academic Skills

The school administers measures that are related to the student's educational needs. Difficulties in the areas of letter formation, orthographic awareness, and general handwriting skills may be evident dependent on the student's age and writing development. Additionally, many students with dysgraphia may have difficulty with spelling and written expression.

Cognitive Processes

The process of handwriting requires the student to rely on memory for letters or symbol sequences, also known as orthographic processing. Memory for letter patterns, letter sequences, and the letters in whole words may be selectively impaired or may coexist with phonological processing weaknesses. When spelling, a student must not only process both phonological and orthographic information, but also apply their knowledge of morphology and syntax (Berninger & Wolf, 2009).

Figure 5.2. Areas for Evaluation of Dysgraphia

<u>Academic Skills</u>	<u>Cognitive Processes</u>	<u>Possible Additional Areas</u>
<ul style="list-style-type: none">• Letter formation• Handwriting• Word/sentence dictation (timed and untimed)• Copying of text• Written expression• Spelling• Writing fluency (both accuracy and fluency)	<ul style="list-style-type: none">• Memory for letter or symbol sequences (orthographic processing)	<ul style="list-style-type: none">• Phonological awareness• Phonological memory• Working memory• Letter retrieval• Letter matching

Berninger, V. W., & Wolf, B. (2009). *Teaching students with dyslexia and dysgraphia lessons from teaching and science*. Baltimore, MD: Paul H. Brookes Publishing.

To make an informed determination the ARD, committee must include members who are knowledgeable about the following:

- Student being assessed
- Evaluation instruments being used
- Interpretation of the data being collected

Additionally, the committee members should have knowledge regarding

- the handwriting process;
- dysgraphia and related disorders;
- dysgraphia instruction, and;
- district or charter school, state, and federal guidelines for evaluation.

Review and Interpretation of Data and Evaluation

To appropriately understand evaluation data, the ARD committee must interpret tests results in light of the student’s educational history, linguistic background, environmental or socioeconomic factors, and any other pertinent factors that affect learning.

A determination must first be made regarding whether a student’s difficulties in the areas of writing and spelling reflect a pattern of evidence for the primary characteristics of dysgraphia with unexpectedly low performance for the student’s age and educational level in some or all of the following areas:

- Handwriting
- Writing fluency (accuracy and rate)
- Written Expression
- Spelling

Based on the above information and guidelines, should the ARD committee determine that the student exhibits weakness in writing and spelling, the committee will then examine the student’s data to determine whether these difficulties are unexpected in relation to the student’s other abilities, sociocultural factors, language differences, irregular attendance, or lack of appropriate and effective instruction. For example, the student may exhibit strengths in areas such as reading comprehension, listening comprehension, oral verbal ability, or math reasoning yet still have difficulty with writing and spelling.

Therefore, it is not one single indicator, but a preponderance of informal and formal data that provide the committee with evidence for whether these difficulties are unexpected.

Dysgraphia Identification

If the student’s difficulties are unexpected in relation to other abilities, the ARD committee must then determine if the student has dysgraphia. The list of questions in Figure 5.3 below must be considered when making a determination regarding dysgraphia.

Figure 5.3. Questions to Determine the Identification of Dysgraphia
<ul style="list-style-type: none">• Do the data show the following characteristics and consequences of dysgraphia?<ul style="list-style-type: none">• Illegible and/or inefficient handwriting with variably shaped and poorly formed letters• Difficulty with unedited written spelling• Low volume of written output as well as problems with other aspects of written expression• Do these difficulties (typically) result from a deficit in graphomotor function (hand movements used for writing) and/or storing and retrieving orthographic codes (letter forms)?• Are these difficulties unexpected for the student’s age in relation to the student’s other abilities and the provision of effective classroom instruction?

Once dysgraphia has been identified, a determination must be made regarding the most appropriate way to serve the student.

The ARD committee will determine whether the student who has dysgraphia is eligible under IDEA as a student with a specific learning disability. The student is eligible for services under IDEA if he/she has dysgraphia and, because of the dysgraphia needs special education services. The October 23, 2015 letter from the Office of Special Education and Rehabilitative Services (OSERS) (Dear Colleague: Dyslexia Guidance) states that dyslexia, dyscalculia, and dysgraphia are conditions that could qualify a child as a

child with a specific learning disability under IDEA. The letter further states that there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations, or IEP documents. For more information, please visit <https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-dyslexia-10-2015.pdf>.

If the student with dysgraphia is found eligible for special education, the student's IEP must include appropriate writing instruction, which might include instruction from a related services provider.

If the student is identified with dysgraphia but is not considered a student with a disability under the IDEA (because the student does not need specially designed instruction), then the student may receive appropriate accommodations and services under Section 504. Students are protected under Section 504 if the physical or mental impairment (dysgraphia) substantially limits one or more major life activities, such as the specific activity of writing. Additionally, the Section 504 committee, in determining whether a student has a disability that substantially limits the student in a major life activity (writing), must not consider the ameliorating effects of any mitigating measures that student is using.

Revision of the Section 504 Plan will occur as the student's response to instruction and to the use of accommodations, if any, is observed. Changes in instruction and/or accommodations must be supported by current data (e.g., classroom performance and dyslexia program monitoring).

Instruction for Students with Dysgraphia

“... Done right, early handwriting instruction improves students' writing. Not just its legibility, but its *quantity and quality*.” (p. 49)

—S. Graham, *Want to Improve Children's Writing? Don't Neglect Their Handwriting*, *American Educator*, 2010

Graham and his colleagues describe two reasons for teaching handwriting effectively. The first reason is what they call the Presentation Effect. Research demonstrates that, in general, a reader's evaluation of a composition's quality is influenced by how neatly it is written (Graham, Harris, & Hebert, 2011). The second reason that educational scientists give for teaching handwriting effectively is called the Writer Effect. Research demonstrates that handwriting difficulties interfere with other writing processes such as expression of ideas and organization. In fact, a 2016 meta-analysis showed that handwriting instruction improved students' writing fluency, quantity, and quality. The findings of this research report were dramatic, showing moderate effects on writing fluency and very large effects on the number of words students wrote and the quality of their compositions (Santangelo & Graham, 2016).

Handwriting interferes with other writing processes or consumes an inordinate amount of cognitive resources, at least until handwriting becomes automatic and fluent ...

Handwriting-instructed students made greater gains than peers who did not receive handwriting instruction in the quality of their writing, how much they wrote, and writing fluency. (p. 226)

—Santangelo & Graham, *A Comprehensive Meta-Analysis of Handwriting Instruction*, 2016

Supporting Students Struggling with Handwriting

Between 10% and 30% of students struggle with handwriting. Early difficulties in this area are significantly correlated with poorer performance on composition tasks. The following are research-based elements of

effective handwriting instruction. These elements, which apply to both manuscript and cursive handwriting, may not necessarily apply to an entire class but instead may be used to support instructional methods delivered in small groups with students whose penmanship is illegible or dysfluent.

1. Show students how to hold a pencil.
2. Model efficient and legible letter formation.
3. Provide multiple opportunities for students to practice effective letter formation.
4. Use scaffolds, such as letters with numbered arrows showing the order and direction of strokes.
5. Have students practice writing letters from memory.
6. Provide handwriting fluency practice to build students' automaticity.
7. Practice handwriting in short sessions.

—Adapted from Berninger et al., 1997; Berninger et al., 2006; Denton, Cope, & Moser, 2006; Graham et al., 2012; Graham, Harris, & Fink, 2000; Graham & Weintrub, 1996.

Some students who struggle with handwriting may actually have dysgraphia. Dysgraphia may occur alone, or with dyslexia. An assessment for dysgraphia, as it relates to dyslexia, is important in order to determine whether children need additional explicit, systematic instruction in handwriting only; handwriting and spelling; or handwriting, spelling, and written expression along with word reading and decoding (IDA, 2012).

Texas Education Code §38.003(b) states, “In accordance with the program approved by the State Board of Education, the board of trustees of each school district shall provide for the treatment of any student determined to have dyslexia or a related disorder.”

While it is important for students with dysgraphia to receive the research-based elements of handwriting, spelling, and written language instruction as part of the core curriculum, for those students who require additional supports and services for dysgraphia, instructional decisions must be made by a committee (either Section 504 or ARD) that is knowledgeable about the instructional elements and delivery of instruction that is consistent with research-based practice.

Handwriting

The research-based elements for effective instruction of handwriting as stated above for all students are the same for students with dysgraphia. However, the intensity, frequency, and delivery of instruction may need to be adjusted to meet specific student need as determined by the Section 504 or ARD committee. Figure 5.4 below provides a hierarchy of instruction for handwriting as a reference to best practice:

Figure 5.4. Handwriting Hierarchy of Instruction	
Posture	Also known as “Watch Our Writing” (W.O.W) <ul style="list-style-type: none"> • Feet are flat on the floor • Back is straight • Paper slanted so that the edge of the paper is parallel to the writing arm • Paper anchored with non-writing hand • Pencil grip and position correct
Grip	Normal tripod grip with pencil resting on first joint of middle finger with the thumb and index fingers holding the pencil in place at a 45° angle.
Letter Formation	Emphasis placed in the following order: <ul style="list-style-type: none"> • Shape • Proportion • Size • Rhythm/fluency • Slant
Sequence	<ul style="list-style-type: none"> • Lower case letters first; Capitals as needed beginning with first letters of student name • Manuscript – group by stroke formation • Cursive – group by beginning approach stroke • Letters • Syllables • Words • Phrases • Sentences • Paragraphs

Spelling

Handwriting supports spelling, a complex process of translating a phoneme (spoken sound) to the corresponding grapheme (orthographic representation) in order to generate written text to express an idea. Orthography is the written spelling patterns and rules in a given language. Students must be taught the regularity and irregularity of the orthographic patterns of a language in an explicit and systematic manner. The instruction should be integrated with phonology and sound-symbol knowledge. Because spelling is meaning driven and draws upon the phonological, orthographic, and morphological aspects of words, students will benefit from systematic, explicit instruction based on the following guiding principles:

- Phoneme-grapheme correspondence
- Letter order and sequence patterns, or orthographic conventions:
 - syllable types
 - orthographic rules
 - irregular words
- Position of a phoneme or grapheme in a word
- Meaning (morphology) and part of speech
- Language of origin (Moats, 2005)

Writing

A potential secondary consequence of dysgraphia is difficulty with students expressing themselves in written text. This difficulty may be attributed to deficits in handwriting, spelling, language processing, or the integration of each of those skills. In Chapter IV of this handbook, Moats and Dakin (2008) are quoted as stating:

The ability to compose and transcribe conventional English with accuracy, fluency, and clarity of expression is known as basic writing skills. Writing is dependent on many language skills and processes and is often even more problematic for children than reading. Writing is a language discipline with many component skills that must be directly taught. Because writing demands using different skills at the same time, such as generating language, spelling, handwriting, and using capitalization and punctuation, it puts a significant demand on working memory and attention. Thus, a student may demonstrate mastery of these individual skills, but when asked to integrate them all at once, mastery of an individual skill, such as handwriting, often deteriorates. To write on demand, a student has to have mastered, to the point of being automatic, each skill involved (p. 55).

Students with written expression difficulties because of dysgraphia would benefit from being taught explicit strategies for composing including planning, generating, reviewing/evaluating, and revising different genre including narrative, informational, compare and contrast, and persuasive compositions (IDA, 2012).

Delivery of Intervention

The way the content is delivered should be consistent with the principles of effective intervention for students with dysgraphia including the following:

- **Simultaneous, multisensory (VAKT)** — “Teaching is done using all learning pathways in the brain (visual, auditory, kinesthetic-tactile) simultaneously in order to enhance memory and learning” (Birsh, 2018, p. 19). “Children are actively engaged in learning language concepts and other information, often by using their hands, arms, mouths, eyes, and whole bodies while learning” (Moats & Dakin, 2008, p. 58).
- **Systematic and cumulative** — “Multisensory language instruction requires that the organization of material follow order of the language. The sequence must begin with the easiest concepts and most basic elements and progress methodically to more difficult material. Each step must also be based on [elements] already learned. Concepts taught must be systematically reviewed to strengthen memory” (Birsh, 2018, p. 19).

- **Explicit instruction** — “Explicit instruction is explained and demonstrated by the teacher one language and print concept at a time, rather than left to discovery through incidental encounters with information. Poor readers do not learn that print represents speech simply from exposure to books or print” (Moats & Dakin, 2008, p. 58). Explicit Instruction is “an approach that involves direct instruction: The teacher demonstrates the task and provides guided practice with immediate corrective feedback before the student attempts the task independently” (Mather & Wendling, 2012, p. 326).
- **Diagnostic teaching to automaticity** — “The teacher must be adept at prescriptive or individualized teaching. The teaching plan is based on careful and [continual] assessment of the individual's needs. The content presented must be mastered to the degree of automaticity” (Birsh, 2018, p. 27). “This teacher knowledge is essential for guiding the content and emphasis of instruction for the individual student” (Moats & Dakin, 2008, p. 58). “When a reading skill becomes automatic (direct access without conscious awareness), it is performed quickly in an efficient manner” (Berninger & Wolf, 2009, p. 70).

Sources for Critical, Evidence-Based Components and Delivery of Dysgraphia Instruction

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Mather, N., & Wendling, B. J. (2012). *Essentials of dyslexia assessment and intervention*. Hoboken, NJ: John Wiley & Sons.

Moats, L. C., & Dakin, K. E. (2008). *Basic facts about dyslexia and other reading problems*. Baltimore, MD: The International Dyslexia Association.

Santangelo, T., & Graham, S. (June 2016). A comprehensive meta-analysis of handwriting instruction. *Educational Psychology Review*, 28(2), 225-265.

Instructional Accommodations for the Student with Dysgraphia

By receiving instruction based on the elements described in this chapter, a student with dysgraphia is better equipped to meet the demands of grade-level or course instruction. In addition to targeted instruction, accommodations provide the student with dysgraphia effective and equitable access to grade-level or course instruction in the general education classroom. **Accommodations are not a one size fits all; rather, the impact of dysgraphia on each individual student determines the accommodation.** When considering accommodations for the student with dysgraphia, consider the following:

- The rate of producing written work
- The volume of the work to be produced
- The complexity of the writing task
- The tools used to produce the written product
- The format of the product (Texas Scottish Rite Hospital for Children, 2018, p. 5).

Listed below are **examples** of reasonable classroom accommodations for a student with dysgraphia based on the above considerations:

- Allow more time for written tasks including note taking, copying, and tests
- Reduce the length requirements of written assignments
- Provide copies of notes or assign a note taking buddy to assist with filling in missing information
- Allow the student to audio record important assignments and/or take oral tests
- Assist student with developing logical steps to complete a writing assignment instead of all at once
- Allow the use of technology (e.g., speech to text software, etc.)
- Allow the student to use cursive or manuscript, whichever is most legible and efficient
- Allow the student to use graph paper for math, or to turn lined paper sideways, to help with lining up columns of numbers
- Offer an alternative to a written project such as an oral report, dramatic presentation, or visual media project

Accommodations are changes to materials, actions, or techniques, including the use of technology, that enable students with disabilities to participate meaningfully in grade-level or course instruction. The use of accommodations occurs primarily during classroom instruction as educators use various instructional strategies to meet the needs of each student. A student may need an accommodation only temporarily

while learning a new skill, or a student might require the accommodation throughout the school year or over several years including beyond graduation.

Decisions about which accommodations to use are very individualized and should be made for each student by that student's ARD or Section 504 committee, as appropriate. Students can, and should, play a significant role in choosing and using accommodations. Students need to know what accommodations are possible, and then, based on knowledge of their personal strengths and limitations, they select and try accommodations that might be useful for them. The more input students have in their own accommodation choices, the more likely it is that they will use and benefit from the accommodations.

When making decisions about accommodations, instruction is always the foremost priority. Not all accommodations used in the classroom are allowed during a state assessment. However, an educator's ability to meet the individual needs of a student with dysgraphia or provide support for the use of an accommodation should not be limited by whether an accommodation is allowable on a state assessment.

In order to make accommodation decisions for students, educators should have knowledge of the Texas Essential Knowledge and Skills (TEKS) and how a student performs in relation to them. Educators should also collect and analyze data pertaining to the use and effectiveness of accommodations (e.g., assignment/test scores with and without the accommodation, observational reports from parents and teachers) so that informed educational decisions can be made for each student. By analyzing data, an educator can determine if the accommodation becomes inappropriate or unnecessary over time due to the student's changing needs. Likewise, data can confirm for the educator that the student still struggles in certain areas and should continue to use the accommodation.

For more information about accommodations, see [At a Glance: Classroom Accommodations for Dysgraphia](https://www.understood.org/en/school-learning/partnering-with-childs-school/instructional-strategies/at-a-glance-classroom-accommodations-for-dysgraphia), available at <https://www.understood.org/en/school-learning/partnering-with-childs-school/instructional-strategies/at-a-glance-classroom-accommodations-for-dysgraphia>

Technology Tools

There are many technology resources to assist a student with dysgraphia. The *Technology Integration for Students with Dyslexia* online tool (TEC §38.0031) is a resource developed to support school districts and charter schools in making instructional decisions regarding technology that benefit students with dyslexia and related disorders. For more information and to view this source, visit <https://www.region10.org/programs/dyslexia/techplan/>.

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ATTACHMENT 6
Text of Proposed Amendment to 19 TAC

Chapter 109. Budgeting, Accounting, and Auditing

Subchapter B. Texas Education Agency Audit Functions

§109.25. State Compensatory Education Program Reporting and Auditing System.

- (a) Each school district and charter school shall report financial information relating to expenditure of the state compensatory education allotment under the Foundation School Program to the Texas Education Agency (TEA). Each school district and charter school shall report the information according to standards for financial accounting provided in §109.41 of this title (relating to Financial Accountability System Resource Guide.) The financial data will be reported annually through the Public Education Information Management System. The commissioner of education shall ensure that districts follow guidelines contained in the "Financial Accountability System Resource Guide" in attributing supplemental direct costs to state compensatory education and accelerated instruction programs and services. Costs charged to state compensatory education shall be for programs and services that supplement the regular education program.
- (b) Each school district and charter school shall ensure that supplemental direct costs and personnel attributed to compensatory education and accelerated instruction are identified in district and/or campus improvement plans at the summary level for financial units or campuses. Each school district and charter school shall maintain documentation that supports the attribution of supplemental costs and personnel to compensatory education. School districts and charter schools must also maintain sufficient documentation supporting the appropriate identification of students in at-risk situations, under criteria established in Texas Education Code (TEC), §29.081.
- (c) The TEA shall conduct risk assessment and desk audit processes to identify the school districts, charter schools, or campuses most at risk of inappropriate allocation and/or underexpenditure of the compensatory education allotment. In the risk assessment and desk audit processes, the TEA shall consider the following factors:
 - (1) aggregate performance of students in at-risk situations on the state assessment instruments that is below the standards for the "acceptable" rating, as defined in the state accountability system;
 - (2) the financial management of compensatory education funds; and/or
 - (3) the quality of data related to compensatory education submitted by a school district or charter school.
- (d) The TEA shall use the results of risk assessment and desk audit processes to prioritize school districts or charter schools for the purpose of on-site visits and may conduct on-site visits.
- (e) The TEA shall issue a preliminary report resulting from a desk audit or an on-site visit before submitting a final report to the school district or charter school. After issuance of a preliminary report, a school district or charter school must file with the TEA the following:
 - (1) a response to the preliminary report within 20 calendar days from the date of the preliminary report outlining steps the school district or charter school will take to resolve the issues identified in the preliminary report; and
 - (2) a corrective action plan within 60 calendar days from the date of the preliminary report if the school district's or charter school's response to the preliminary report does not resolve issues identified in the preliminary report.
- (f) The TEA shall issue a final report that indicates whether the school district or charter school has resolved the findings in the preliminary report and whether the corrective action plan filed under subsection (e)(2) of this section is adequate.
 - (1) If the final report contains a finding of noncompliance with TEC, §48.104(k) [~~§42.152(e)~~], the report shall include a financial penalty authorized under TEC, §48.104(o) [~~§42.152(q)~~].

- (2) If the school district or charter school responds with an appropriate corrective action plan, the TEA shall rescind the financial penalty and release the amount of the penalty to the school district or charter school.
- (g) The TEA may conduct an on-site visit to verify the implementation of a school district's or charter school's corrective action plan.

Minutes

State Board of Education Committees

August 31- September 2, 2021

**Report of the State Board of Education
Committee of the Full Board
Tuesday, August 31, 2021**

The State Board of Education Committee of the Full Board met at 9:14 a.m. on Tuesday, August 31, 2021, in the State Board of Education Room, #1-104, of the William B. Travis Building, 1701 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

Present: Keven Ellis, chair; Lawrence A. Allen, Jr. (virtual); Rebecca Bell-Metereau; Ruben Cortez, Jr.; Aicha Davis; Patricia Hardy; Will Hickman; Jay Johnson; Pam Little; Tom Maynard; Sue Melton-Malone; Georgina C. Pérez; Marisa B. Perez-Diaz; Matt Robinson; Audrey Young

Public Testimony

The Committee of the Full Board heard public testimony on agenda items #1, #2, and #3. Information regarding the individuals who presented public testimony is included in the discussion of that item.

DISCUSSION ITEMS

- 1. Public Hearing on Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training; Subchapter I, Health Science; Subchapter J, Hospitality and Tourism; Subchapter M, Law and Public Service; and Subchapter O, Science, Technology, Engineering, and Mathematics**
(Board agenda page I-1)

Invited testimony was provided by the following individuals:

NAME: Monica Oliver
AFFILIATION: Work Group Member (Teaching and Training)

NAME: Chris McClanahan
AFFILIATION: Work Group Member (Nursing Science)

NAME: Beverly Clemmons
AFFILIATION: Work Group Member (Food Science)

NAME: Laura Clark
AFFILIATION: Work Group Member (Forensic Science)

NAME: Anne Marie Rusche
AFFILIATION: Work Group Member (Early Learning)

NAME: DeDe Gardner
AFFILIATION: Work Group Member (Medical Therapy)

NAME: Anna Haro
AFFILIATION: Work Group Member (Healthcare Therapeutic)

NAME: Nicole Henneke
AFFILIATION: Work Group Member (Healthcare Diagnostics)

NAME: Deborah Hunt
AFFILIATION: Work Group Member (Health Informatic)

NAME: Thomas Andrews
AFFILIATION: Work Group Member (Biomedical)

NAME: Ruthelen Robinson
AFFILIATION: Work Group Member (Engineering)

Public testimony was provided by the following individuals:

NAME: Eliza Epstein
AFFILIATION: Self

NAME: Corina Zamora
AFFILIATION: Self

2. Public Hearing on Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §§112.1-112.7, and Subchapter B, Middle School, §§112.25-112.28
(Board agenda page I-3)

Invited testimony was provided by the following individuals:

NAME: Gloria Chatelain
AFFILIATION: Content Advisor

NAME: Ron Wetherington, Ph.D
AFFILIATION: Content Advisor

NAME: Dale Woerner, Ph.D.
AFFILIATION: Content Advisor

NAME: Jane Arden Zimmerman
AFFILIATION: Content Advisor

NAME: Amy Senato
AFFILIATION: Content Advisor

Public testimony was provided by the following individuals:

NAME: William Moulton
AFFILIATION: Self

NAME: Leila Cornelius
AFFILIATION: Self

NAME: Jennifer Meyer
AFFILIATION: Self

NAME: Lisa Owens
AFFILIATION: Self

NAME: Heather Ball
AFFILIATION: Self

NAME: Richard Gonzalez
AFFILIATION: Self

NAME: Jason Isaac
AFFILIATION: Self

NAME: Kathy Shannon
AFFILIATION: Self

NAME: Eliza Epstein
AFFILIATION: Self

NAME: Ann Mulvihill
AFFILIATION: Self

NAME: Robert Martinez
AFFILIATION: Self

NAME: Cindy Bronson
AFFILIATION: Self

NAME: Rocio Fierro-Perez
AFFILIATION: Self

NAME: Darren Nevares
AFFILIATION: Self

NAME: John Tate
AFFILIATION: Self

NAME: Sandra West
AFFILIATION: Self

3. Public Hearing Regarding Instructional Materials Submitted for Adoption by the State Board of Education Under *Proclamation 2022*

(Board agenda page I-5)

Public testimony was provided by the following individuals:

NAME: Vanessa MacDougal
AFFILIATION: Self

NAME: Jacquelyn Dudasko
AFFILIATION: Self

NAME: Eliza Epstein
AFFILIATION: Self

NAME: Lori Kuykendall
AFFILIATION: Self

NAME: Ivania Gutierrez
AFFILIATION: Self

NAME: Frederick Heather
AFFILIATION: Self

NAME: Susanne Kerns
AFFILIATION: Self

NAME: Jules Mandel
AFFILIATION: Self

NAME: Andrea Elizondo
AFFILIATION: Self

NAME: Tamsen Valoir
AFFILIATION: Self

NAME: Christy Baca
AFFILIATION: Self

NAME: Belynda Montgomery
AFFILIATION: Self

NAME: Mary Castle
AFFILIATION: Self

Dr. Ellis adjourned the meeting at 2:23 p.m.

**Report of the State Board of Education
Committee of the Full Board
Wednesday, September 1, 2021**

The State Board of Education Committee of the Full Board met at 9:06 a.m. on Wednesday, September 1, 2021, in the State Board of Education Room, #1-104, of the William B. Travis Building, 1701 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

Present: Keven Ellis, chair; Lawrence A. Allen, Jr. (virtual); Rebecca Bell-Metereau; Ruben Cortez, Jr.; Aicha Davis; Patricia Hardy; Will Hickman; Jay Johnson; Pam Little; Tom Maynard; Sue Melton-Malone; Georgina C. Pérez; Marisa B. Perez-Diaz; Matt Robinson; Audrey Young

Public Testimony

The Committee of the Full Board heard public testimony on agenda item #5. Information regarding the individuals who presented public testimony is included in the discussion of that item.

The Committee of the Full Board considered items in the following order: Item number 1, 2, 3, 7, 4, 5, 6.

DISCUSSION ITEMS

1. Commissioner's Comments
(Board agenda page I-6)

Commissioner Mike Morath provided an overview of Texas COVID Learning Acceleration Supports (TCLAS) funding and supports that will be provided to school districts and charter schools through a single, streamlined, discretionary non-competitive grant application. TCLAS includes the following five accelerated learning strategies: strategic planning, instructional materials, teacher pipelines, more time, and innovative school models. Commissioner Morath also explained tutoring implementation supports that will be available to school districts. He also provided an overview of House Bill (HB) 1525 that creates a one-time funding source to help high schools adopt and build career pathways and adjusts the weighted funding for CTE courses to create a financial incentive for school districts to implement rigorous pathways for students.

ACTION ITEMS

2. Proposed New 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training; Subchapter I, Health Science; Subchapter J, Hospitality and Tourism; Subchapter M, Law and Public Service; and Subchapter O, Science, Technology, Engineering, and Mathematics (First Reading and Filing Authorization)
(Board agenda page I-7)

Shelly Ramos, senior director, curriculum standards and student support, explained that this item proposes new Texas Essential Knowledge and Skills (TEKS) for 38 of the career and technical education (CTE) courses from subchapters E, H, I, J, L, and O.

MOTION: *It was moved by Mr. Maynard and seconded by Ms. Hardy to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.416-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.651 and §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.791.*

Ms. Ramos explained that staff recommendations for minor revisions to the proposed TEKS had been incorporated into the rule text for the board’s consideration. She also explained possible misalignment between the technology applications TEKS for Kindergarten-Grade 8 and the high school computer science courses dependent upon the outcome of the technology applications TEKS review.

MOTION AND VOTE: *It was moved by Mrs. Little, seconded by Ms. Hardy, and carried without objection to amend the main motion by striking “Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.791” and inserting “Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787.”*

VOTE: *A vote was taken on the main motion to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, Subchapter G, Education and Training, §§127.315, 127.316, 127.319-127.321, and 127.324-127.326; Subchapter I, Health Science, §§127.416-127.433; Subchapter J, Hospitality and Tourism, §127.481 and §127.482; Subchapter M, Law and Public Service, §127.651 and §127.652; and Subchapter O, Science, Technology, Engineering, and Mathematics, §§127.777-127.782 and 127.785-127.787, as amended. The motion carried unanimously.*

3. Proposed New 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §§112.1-112.7, and Subchapter B, Middle School, §§112.25-112.28 (First Reading and Filing Authorization)

(Board agenda page I-11)

Ms. Ramos provided an overview of the process for revisions to the Kindergarten-Grade 8 science TEKS. At the request of the board, Work Group F met virtually and made final recommendations that would clean up language and vertically align the K-8 science standards.

MOTION: *It was moved by Mrs. Little and seconded by Mrs. Melton-Malone to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021.*

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education add new §§112.2(a)(3)(A) and (B), 112.3(a)(3)(A) and (B), 112.4(a)(3)(A) and (B), 112.5(a)(3)(A) and (B), §112.6(a)(3)(A) and (B), and §112.7 (a)(3)(A) and (B) to read:*

“(3) Scientific hypotheses and theories. Students are expected to know that:

“(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

“(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.”

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §§112.2(a)(4), 112.3(a)(4), 112.4(a)(4), 112.5(a)(4), 112.6(a)(4), 112.7(a)(4), 112.26(a)(5), 112.27(a)(5), and 112.28(a)(5) to replace the phrase “stability and change” with “change and constancy.”*

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Mrs. Melton-Malone, and carried to recommend that the State Board of Education amend §§112.26(b)(4)(B), 112.27(b)(4)(B), and 112.28(b)(4)(B) to add “cost-effectiveness” after the word “accuracy.”*

MOTION AND VOTE: *It was moved by Mr. Hickman and seconded by Ms. Hardy to recommend that the State Board of Education amend §112.2 (a)(2) to strike the word “currently” from the phrase “not currently scientifically testable.” The motion failed.*

MOTION AND VOTE: *It was moved by Mr. Hickman and seconded by Mrs. Little to recommend that the State Board of Education amend §112.6(a)(D) and §112.7(a)(D) to read:*

“Earth and space. Students learn about processes on Earth that create patterns of change. These processes include the water cycle, weathering, erosion, deposition, the appearance of the Moon, and seasons. Students build on this understanding in Grade 5 when they learn about day and night, shadows, and the appearance of apparent movement of the Sun due to the rotation of Earth on its axis. Finally, students identify Earth's resources and classify them as renewable or nonrenewable.”
The motion failed.

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Mrs. Little, and carried to recommend that the State Board of Education amend §112.5(b)(3)(B), §112.6(b)(3)(B) and §112.7(b)(3)(B) to read:*

“communicate explanations and solutions individually and collaboratively in a variety of settings and formats ~~valid conclusions to determine explanations from both direct and indirect evidence;~~ and”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.2(b)(8)(A) to read:*

“communicate the idea ~~identify~~ that objects can only be seen when a light source is present and compare the effects of different amounts of light on the appearance of objects; and”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.2(b)(8)(B) to read:*

“~~identify and demonstrate~~ and explain that light travels through some objects and is blocked by other objects, creating shadows.”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Mrs. Little, and carried without objection to recommend that the State Board of Education amend §112.2(b)(10)(C) to read:*

“identify evidence that supports the idea ~~describe~~ that air is all around us and demonstrate that wind is moving air using items such as a windsock, pinwheel, or ribbon.”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.2(b)(13)(A) to read:*

“identify the structures ~~and functions~~ of plants, including roots, stems, leaves, flowers, and fruits;”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.2(b)(13)(B) to read:*

“identify the ~~that animals have~~ different structures that animals have that allow them to interact with their environment such as seeing, hearing, moving, and grasping objects;”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.3(b)(6)(C) to read:*

“demonstrate and explain that a whole object is a system made of organized parts such as a toy that can be taken apart and put back together.”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Mrs. Little, and carried without objection to recommend that the State Board of Education amend §112.3(b)(10)(B) to read:*

“investigate and describe how water can move rock ~~rocks~~ and soil particles from one place to another;”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Mr. Maynard, and carried to recommend that the State Board of Education amend §112.4(b)(10)(A) to read:*

“investigate and describe how wind and water move soil and rock particles ~~rocks~~ across the Earth's surface such as wind blowing sand into dunes on a beach or a river carrying rocks as it flows;”

(Mr. Cortez was absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Pérez and carried without objection to recommend that the State Board of Education amend §112.4(b)(11)(B) to read:*

“describe ~~demonstrate~~ how ~~to limit~~ human impact can be limited by making choices to conserve and properly dispose of materials such as reducing use of, reusing, or recycling paper, plastic and metal.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education amend §112.5(b)(12)(D) to read:*

“identify fossils as evidence of past living organisms and environments, including common Texas fossils.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Mr. Hickman and seconded by Ms. Hardy to recommend that the State Board of Education amend §§112.5(b)(1)(D), 112.6(b)(1)(D), and 112.7(b)(1)(D) to read:*

“use tools, including hand lenses; ~~metric~~ rulers; ~~Celsius~~ thermometers; wind vanes; rain gauges; graduated cylinders; beakers; digital scales; hot plates; measuring meter sticks; magnets; notebooks; Sun, Earth, Moon system models; timing devices; materials to support observation of habitats of organisms such as terrariums, aquariums, and collecting nets; and materials to support digital data collection such as computers, tablets, and cameras, to observe, measure, test, and analyze information;”

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Mr. Maynard, and carried without objection to recommend that the State Board of Education amend §112.6(b)(8)(C) to read:*

“demonstrate and describe how ~~identify that~~ electrical energy travels in a closed path that can produce light and thermal energy.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Mr. Hickman, and carried without objection to recommend that the State Board of Education amend §112.6(b)(12)(C) to read:*

“identify and describe past environments ~~including based on~~ fossil evidence, including common Texas fossils.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Mr. Hickman, seconded by Dr. Johnson, and carried to recommend that the State Board of Education amend §§112.6(a)(1)(D) and 112.7(a)(1)(D) to change the phrase “the apparent movement of the Sun” to “the rotation of Earth on its axis.”*

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy and seconded by Ms. Pérez to recommend that the State Board of Education amend §112.6(b)(11)(A) to read:*

“identify and explain advantages and disadvantages of using Earth's natural renewable resources such as wind, water, sunlight, plants, ~~and animals, and nonrenewable resources such as~~ coal, oil, and natural gas; and”

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Mr. Hickman, seconded by Dr. Robinson, and carried to recommend that the State Board of Education amend §112.6(b)(11)(A) to read:*

“identify and explain advantages and disadvantages of using Earth's renewable ~~resources such as wind, water, sunlight, plants, and animals~~ and nonrenewable natural resources such as wind, water, sunlight, plants, animals, coal, oil, and natural gas; and”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Mrs. Melton-Malone, and carried unanimously to recommend that the State Board of Education amend §112.6(b)(11)(B) to read:*

“explain how conservation, disposal, and recycling of ~~renewable and non-renewable~~ natural resources impact the environment.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.7(b)(9) to read:*

“Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to demonstrate that Earth rotates on its axis once approximately every 24 hours and explain how that causes ~~causing~~ the day/night cycle and the apparent movement of the Sun across the sky, resulting in changes in shadow positions and shapes.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Mr. Maynard, seconded by Ms. Hardy, and carried unanimously to recommend that the State Board of Education amend §112.7(b)(9) to read:*

“Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to demonstrate that Earth rotates on its axis once approximately every 24 hours and explain how that causes the day/night cycle and the appearance of the Sun moving across the sky ~~and the apparent movement of the Sun across the sky~~, resulting in changes in shadow positions and shapes.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Mr. Maynard, and carried without objection to recommend that the State Board of Education amend §112.7(b)(11) to read:*

“Earth and space. The student understands how natural resources are important and can be managed. The student is expected to design and explain solutions such as conservation, recycling, or proper disposal to minimize environmental impact of the use of ~~renewable and non-renewable~~ natural resources.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Robinson, seconded by Ms. Hardy, and carried without objection to recommend that the State Board of Education amend §112.4(b)(8)(A) to read:*

“demonstrate and explain that sound is made by vibrating matter and that vibrations can be caused by a variety of means, including sound ~~and that sound can make matter vibrate;~~”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Hardy, seconded by Dr. Johnson, and carried without objection to recommend that the State Board of Education amend §112.7(b)(1)(D) to read:*

“Earth and space. This strand is focused on identifying recognizable patterns and processes as students learn about Earth’s rotation and demonstrate the effects this movement has on Earth’s surface, including day and night, shadows, and rotation of Earth on its axis. Students continue their learning of patterns and processes on Earth while exploring weather, climate, the water cycle, the formation of sedimentary rock and fossil fuels, and the formation of landforms. Finally, students learn ways to manage natural ~~renewable and nonrenewable~~ resources to support a healthy environment.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Bell-Metereau and seconded by Ms. Davis to recommend that the State Board of Education amend §112.7(b)(8)(C) to read:*

“Demonstrate and explain how light generally travels in a straight line ~~and~~ but can be reflected, ~~and~~ refracted, or bent by gravity.”

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Robinson, seconded by Ms. Hardy, and carried to recommend that the State Board of Education amend §112.26(b)(8)(A) to read:*

“compare and contrast ~~kinetic energy with~~ gravitational, elastic, and chemical potential energies with kinetic energy;”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Ms. Pérez and carried to recommend that the State Board of Education amend §112.28(b)(1)(D) to add weather maps to the list of tools.*

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Perez-Diaz to recommend that the State Board of Education amend §112.28(b)(11)(A) to read:*

“use scientific evidence to describe how the release and absorption of greenhouse gases, abrupt changes in ocean currents, and other natural events, ~~natural events~~ such as volcanic eruptions and meteor impacts, ~~abrupt changes in ocean currents, and the release and absorption of greenhouse gases~~ influence climate; and”

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young and seconded by Ms. Hardy to recommend that the State Board of Education amend §112.28 (b)(11)(B) to read:*

“ask questions and research evidence to develop arguments about how human activities may affect climate change ~~use scientific evidence to describe how human activities can influence climate such as the release of greenhouse gases.~~”

The motion failed.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Perez-Diaz, seconded by Dr. Robinson, and carried to recommend that the State Board of Education amend §112.28(b)(11)(B) to read:*

“use scientific evidence to describe how human activities over the past 150 years, including the release of greenhouse gases, ~~can~~ influence climate ~~such as the release of greenhouse gases.~~”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Perez-Diaz, seconded by Dr. Bell-Metereau, and carried to recommend that the State Board of Education add new §112.28(b)(11)(C) to read:*

“describe efforts to mitigate climate change, including a reduction in greenhouse gas emissions.”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Ms. Pérez, seconded by Ms. Davis, and carried to recommend that the State Board of Education amend §112.28(b)(11)(A) to read:*

“use scientific evidence to describe how natural events, including ~~such as~~ volcanic eruptions, meteor impacts, abrupt changes in ocean currents, and the release and absorption of greenhouse gases influence climate;”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Mr. Maynard, and carried to recommend that the State Board of Education amend §112.7(b)(6)(C) to read:*

“compare the properties of substances before and after they are combined into a solution and demonstrate that matter is conserved in solutions; and”

(Mr. Cortez and Dr. Ellis were absent for the vote.)

VOTE: *A vote was taken on the original motion to recommend that the State Board of Education approve for first reading and filing authorization proposed new 19 TAC Chapter 112, Texas Essential Knowledge and Skills for Science, Subchapter A, Elementary, §112.1, Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021; §112.2, Science, Kindergarten, Adopted 2021; §112.3, Science, Grade 1, Adopted 2021; §112.4, Science, Grade 2, Adopted 2021; §112.5, Science, Grade 3, Adopted 2021; §112.6, Science, Grade 4, Adopted 2021; and §112.7, Science, Grade 5, Adopted 2021, and Subchapter B, Middle School, §112.25, Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021; §112.26, Science, Grade 6, Adopted 2021; §112.27, Science, Grade 7, Adopted 2021; and §112.28, Science, Grade 8, Adopted 2021, as amended.*

The motion carried.

(Mr. Cortez and Dr. Ellis were absent for the vote.)

DISCUSSION ITEM

4. Update on the Review of Proclamation 2022 Instructional Materials (Board agenda page I-53)

Amie Williams, director, instructional materials review and procurement, provided a brief update on the instructional material review of health and PE materials for *Proclamation 2022* that was held this summer. Ms. Williams presented preliminary reports compiled from the results of the *Proclamation 2022* review and explained that the board will have the opportunity to adopt these materials at the November 2021 meeting.

ACTION ITEM

5. Update on Texas Essential Knowledge and Skills (TEKS) Review (Board agenda page I-54)

Public testimony was provided by the following individuals:

NAME: Renee Blackmon
AFFILIATION: Self

NAME: Meghan Dougherty
AFFILIATION: Self

NAME: Ann Mulvihill
AFFILIATION: Self

NAME: Cindy Bronson
AFFILIATION: Self

NAME: Sandra West
AFFILIATION: Self

Ms. Ramos provided an update on the review process for the Texas Essential Knowledge and Skills (TEKS) that are currently under review or are soon to be under review: career and technical education (CTE), technology applications, and social studies.

DISCUSSION ITEMS

6. Discussion of 19 TAC Chapter 101, Assessment, Subchapter A, General Provisions, Subchapter B, Implementation of Assessments, and Subchapter C, Local Option (Board agenda page I-57)

Julie Cole, director of policy and publications, student assessment divisions, explained that this item provided an opportunity for the board to discuss administrative rules in 19 TAC Chapter 101 related to student assessment.

7. Discussion on Pending Litigation (Board agenda page I-62)

MOTION AND VOTE: *It was moved by Ms. Pérez and carried that the Committee of the Full Board meet in executive session with the Board and their attorneys present to discuss pending litigation under Texas Government Code, §551.071.*

(Mr. Cortez and Dr. Ellis were absent for the vote.)

The board met in executive session.

Dr. Ellis adjourned the meeting at 6:08 p.m.

**Report of the State Board of Education
Committee on Instruction
Thursday, September 2, 2021**

The State Board of Education Committee on Instruction met at 9:01 a.m. on Thursday, September 2, 2021, in Room #1-111 of the William B. Travis Building, 1701 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

Present: Sue Melton-Malone, chair; Rebecca Bell-Metereau; Pam Little; Georgina C. Pérez; Audrey Young, vice-chair

Non-Committee Member Present: Aicha Davis

Public Testimony

The Committee on Instruction heard public testimony on agenda item #1. Information regarding the individuals who presented public testimony is included in the discussion of that item.

DISCUSSION ITEM

- 1. Public Hearing on Proposed Amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders**
(Board agenda page II-1)

Public testimony was provided by the following individuals:

NAME: Michele Martella
AFFILIATION: Self

NAME: Kristin McGuire
AFFILIATION: Texas Council of Administrators of Special Education

NAME: Steven Aleman
AFFILIATION: Disability Rights Texas

NAME: Daphne Corder
AFFILIATION: Self

NAME: Elizabeth Wilson
AFFILIATION: Self

NAME: Rebecca Holmes
AFFILIATION: Self

NAME: Robbi Cooper
AFFILIATION: Self

NAME: Libby Grafa
AFFILIATION: Self

NAME: Stephanie Virag
AFFILIATION: Self

NAME: Linda Whitman
AFFILIATION: Self

NAME: Linda McKnight
AFFILIATION: Self

NAME: Nilam Agrawal
AFFILIATION: Self

NAME: Jessamyn Putnam
AFFILIATION: Self

ACTION ITEMS

- 2. Proposed Amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders (Second Reading and Final Adoption)**
(Board agenda page II-3)

Monica Martinez, associate commissioner for standards and support services, explained that, based on public comments received, staff was recommending specific amendments to the proposed updates to the Dyslexia Handbook.

MOTION: *It was moved by Mrs. Little and seconded by Dr. Young to recommend that the State Board of Education approve for second reading and final adoption the proposed amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders; and*

Make an affirmative finding that immediate adoption of the proposed amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register.

MOTION AND VOTE: *It was moved by Mrs. Little, seconded by Dr. Bell-Metereau, and carried unanimously to amend the Dyslexia Handbook to include the staff recommendations included in the handout discussed by the committee (Attachment A).*

Ms. Martinez requested approval from the committee to make technical edits as needed. The committee agreed. Ms. Martinez also explained that the appendices in the handbook were not a part of the Texas Administrative Code and that changes to the appendices, including the frequently-asked-questions section, the publication date of the manual, front matter and the color scheme would be made by staff with the committee's permission which was granted.

VOTE: *A vote was taken on the motion to recommend that the State Board of Education approve for second reading and final adoption the proposed amendment to 19 TAC Chapter 74, Curriculum Requirements, Subchapter C, Other Provisions, §74.28, Students with Dyslexia and Related Disorders, as amended. The motion carried unanimously.*

3. **Proposed Repeal of 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter D, Special Education Services and Settings, §89.61, Contracting for Residential Educational Placements for Students with Disabilities, and §89.63, Instructional Arrangements and Settings (Second Reading and Final Adoption)**
(Board agenda page II-106)

Justin Porter, state director, special education programs, explained that this proposed repeal is necessary because the 86th Texas Legislature, 2019, transferred rulemaking authority related to instructional arrangements for students with disabilities from the State Board of Education to the commissioner of education. He indicated that only two public comments were received and that no changes were recommended since approval at first reading and filing authorization.

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Mrs. Little, and carried unanimously to recommend that the State Board of Education approve for second reading and final adoption the proposed repeal of 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter D, Special Education Services and Settings, §89.61, Contracting for Residential Educational Placements for Students with Disabilities, and §89.63, Instructional Arrangements and Settings; and*

Make an affirmative finding that immediate adoption of the proposed repeal of 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter D, Special Education Services and Settings, §89.61, Contracting for Residential Educational Placements for Students with Disabilities, and §89.63, Instructional Arrangements and Settings, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register.

4. **Approval of Updates and Substitutions to Adopted Instructional Materials**
(Board agenda page II-115)

Amie Williams, director, instructional materials review and procurement, explained that the Children's Learning Institute at The University of Texas (UT) Health Science Center at Houston was requesting approval to update content in its adopted English and Spanish prekindergarten products and that curriculum subject-area specialists have reviewed the requested changes.

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Mrs. Little, and carried unanimously to recommend that the State Board of Education approve the request from the Children's Learning Institute at UT Health Science Center at Houston to update content in its adopted products CIRCLE Pre-K Curriculum (English) and CIRCLE Pre-K Curriculum: Spanish Edition.*

5. Report from the Commissioner of Education Regarding Updated Texas Prekindergarten Guidelines Alignment for Adopted Instructional Materials
(Board agenda page II-117)

Ms. Williams explained that in 2019 the State Board of Education (SBOE) adopted a rule and tasked the agency with establishing a procedure to allow publishers of adopted materials an opportunity to increase their standards alignment percentage in the year following original adoption. She explained that a state review panel was convened in June to review the content provided to align to standards missed in the initial *Proclamation 2021* review. This item would allow publishers to introduce this content into their adopted materials and update the percentages listed in EMAT and on the adopted list.

MOTION AND VOTE: *It was moved by Dr. Young, seconded by Mrs. Little, and carried unanimously to recommend that the State Board of Education require that all publishers make changes listed in the Texas Prekindergarten Guidelines Update Report of Editorial Changes, approve changes and corrections submitted in response to written comments and public testimony, and update the official TPG percentage for instructional materials reviewed for TPG Updates on the Instructional Materials Current Adoption Bulletin.*

DISCUSSION ITEM

6. Rule Review of 19 TAC Chapter 74, Curriculum Requirements
(Board agenda page II-121)

Jessica Snyder, special projects director, curriculum division, explained that this item provides an opportunity for the board to review the rules in 19 TAC Chapter 74 and determine if they are still necessary, whether the statutory authority for the rules still exist, and if any future action may need to be taken. She explained that 19 TAC Chapter 74, Curriculum Requirements, includes rules related to the required curriculum and the graduation requirements. Ms. Snyder stated that an item will be presented at the November meeting to allow the board to consider amendments to rules related to the foundation high school program. She further explained that a proposed repeal of Subchapter D (graduation requirements for students who entered Grade 9 beginning in 2001-2002) and Subchapter E (graduation requirements for students who entered Grade 9 beginning in 2004-2005) will also be presented for consideration at a future meeting.

The meeting of the Committee on Instruction adjourned at 11:07 a.m.

Dyslexia Handbook Comments and Recommended Edits

Comment	Original Proposed Language	Proposed Amendment
<p>Page 15: To align HB3 and the handbook, the handbook could say letter sound knowledge or letter naming fluency. TX-KEA has letter sound knowledge, but not fluency. mClass has letter naming fluency, which requires letter sound knowledge. So making it “or” aligns that at KG. From a research perspective, both are predictive. These should be part of KG screening for dyslexia and early literacy.</p>	<p>Figure 2.2. Criteria for English and Spanish Screening Instruments Kindergarten</p> <ul style="list-style-type: none"> • Letter Naming Fluency • Phonological Awareness • [Phonemic Awareness] • [Sound-Symbol Recognition] • [Letter Knowledge] • [Decoding Skills] • [Spelling] • [Listening Comprehension] 	<p>Figure 2.2. Criteria for English and Spanish Screening Instruments Kindergarten</p> <ul style="list-style-type: none"> • Letter Sound Knowledge or Letter Naming Fluency • Phonological Awareness • [Phonemic Awareness] • [Sound-Symbol Recognition] • [Letter Knowledge] • [Decoding Skills] • [Spelling] • [Listening Comprehension]
<p>Page 20: There is a prescribed process for FIIEs under both federal and state law. The steps in the FIIE process are too complex to capture in the flowchart but cannot be overlooked and should be better stated. In Figure 2.5, edit and change the wording in lower right text box as follows: “Seek parental consent for a Full Individual Initial Evaluation (FIIE) and, if the school receives consent, conduct the FIIE within 45 school days, while ...”.</p>	<p><u>Obtain parental consent and conduct Full Individual Initial Evaluation (FIIE) within 45 school days of the date of parent consent, while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions. The ARD committee (including the parent) meets to review the results of the FIIE.</u></p>	<p><u>Obtain parental consent and conduct Full Individual Initial Evaluation (FIIE) within 45 school days of the date of parent consent, Seek parental consent for a Full Individual Initial Evaluation (FIIE) and, if the school receives consent, conduct the FIIE within 45 school days, while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions. The ARD committee (including the parent) meets to review the results of the FIIE.</u></p>
<p>Page 27: This sentence has caused a great deal of confusion, because if the student is already eligible for under IDEA or Section 504, then this team typically would be the student’s ARD or Section 504 Committee, respectively. Perhaps consider inserting a phrase in the final sentence so it reads, “Unless the student is already served under IDEA or Section 504, this team of knowledgeable persons is not an</p>	<p>This team of knowledgeable persons is not an Admission, Review, and Dismissal (ARD) committee or a Section 504 committee, although many of these individuals may be on a future committee if the student is referred for an evaluation and qualifies for services and/or accommodations.</p>	<p>Unless the student is already served under IDEA or Section 504, this team of knowledgeable persons is not an Admission, Review, and Dismissal (ARD) committee or a Section 504 committee, although many of these individuals may be on a future committee if the student is referred for an evaluation and qualifies for services and/or accommodations.</p>

<p>Admission, Review, and Dismissal (ARD) committee or a Section 504 committee, although many of these individuals may be on a future committee if the student is referred for an evaluation and qualifies for services and/or accommodations.”</p>		
<p>Page 27: In the subsection labeled “When the Data Lead to a Suspicion of a Disability, Including Dyslexia or a Related Disorder,” schools are directed to initiate a FIIE. However, it should be noted that schools are not limited in attempting to assist the student while the FIIE is underway. After the second sentence under the subsection, insert and add a new sentence as follows: “The student should continue to receive grade level, evidence-based core reading instruction (Tier 1) and any other appropriate tiered interventions while the school conducts the FIIE.”.</p>	<p>If the team suspects that the student has dyslexia, or a related disorder, <u>or another disability included within the IDEA, the team must refer the student for [the team should consider the type of instruction that would best meet the student’s needs] a full individual and initial evaluation (FIIE). In most cases, an FIIE under the IDEA must be completed within 45-school days from the time a district or charter school receives parental consent.</u></p>	<p>If the team suspects that the student has dyslexia, or a related disorder, <u>or another disability included within the IDEA, the team must refer the student for [the team should consider the type of instruction that would best meet the student’s needs] a full individual and initial evaluation (FIIE). In most cases, an FIIE under the IDEA must be completed within 45-school days from the time a district or charter school receives parental consent. <u>The student should continue to receive grade level, evidence-based core reading instruction (Tier 1) and any other appropriate tiered interventions while the school conducts the FIIE.</u></u></p>
<p>On page 28 of the Handbook under the heading Parents/guardians always have the right to request a referral for a dyslexia evaluation at any time. In the 3rd sentence, there is the statement "Under the IDEA, if the school rejects the request to evaluate,.....(Is "reject" the best word here?).</p> <p>Parents/guardians always have the right to request a 504 evaluation for a disability at any time. Parents/guardians could request a 504 evaluation after their request was "rejected" under IDEA. That should be stated here along with Parents/guardians always have the right to request a 504 dyslexia evaluation at any time.</p>	<p>Under <u>the IDEA, if the school rejects the request to evaluate, it schools</u> must give parents prior written notice of a refusal to evaluate, including an explanation of why the school refuses to conduct an initial evaluation <u>FIIE</u>, the information that was used as the basis for the decision, and a copy of the <i>Notice of Procedural Safeguards</i>.</p>	<p>Under <u>the IDEA, if the school rejects</u> refuses <u>the request to evaluate, it schools</u> must give parents prior written notice of a refusal to evaluate, including an explanation of why the school refuses to conduct an initial evaluation <u>FIIE</u>, the information that was used as the basis for the decision, and a copy of the <i>Notice of Procedural Safeguards</i>. <u>Should the parent disagree with the school's refusal to conduct an evaluation, the parent has the right to initiate dispute resolution options including; mediation, state complaints, and due process hearings. Additionally, the parent may request an Independent Educational Evaluation (IEE) at public expense. Should the parent believe that</u></p>

		their child is eligible for Section 504 aids, accommodations, and services the parent may request an evaluation under Section 504.
Page 30: “As discussed above, Child Find...” Child Find was discussed in chapter 2, but with the proposed changes, there is no previous discussion of Child Find in this chapter. This phrase could be deleted to avoid confusion.	As discussed above, <u>Child Find is a provision in the federal Individuals with Disabilities Education Act (IDEA), a federal law that requires the state to have policies and procedures in place to ensure that every student in the state who needs special education and related services is located, identified, and evaluated.</u>	As discussed <u>in Chapter 2</u> above , <u>Child Find is a provision in the federal Individuals with Disabilities Education Act (IDEA), a federal law that requires the state to have policies and procedures in place to ensure that every student in the state who needs special education and related services is located, identified, and evaluated.</u>
On page 34, in the section labeled “Formal Evaluation,” we recommend adding a specific sentence about how the campus or district dyslexia specialist should be involved in the FIIE, similar to how this is referenced on page 37 where it refers to reviewing and interpreting the data from the evaluation.	Professionals conducting evaluations for the identification of dyslexia will need to look beyond scores on standardized assessments alone and examine the student’s classroom reading performance, educational history, early language experiences, and, when warranted, academic potential to assist with determining reading, spelling, and writing abilities and difficulties.	Professionals conducting evaluations for the identification of dyslexia will need to look beyond scores on standardized assessments alone and examine the student’s classroom reading performance, educational history, early language experiences, and, when warranted, academic potential to assist with determining reading, spelling, and writing abilities and difficulties. As part of the evaluation when dyslexia is suspected, in addition to the parent and team of qualified professionals required under IDEA, it is recommended that the multi-disciplinary evaluation team include members who have specific knowledge regarding- <ul style="list-style-type: none"> • the reading process, • dyslexia and related disorders, and • dyslexia instruction.
Page 34: All of the committee references have been for the ARD Committee, but in the paragraph under Notification & Permission, it says “ARD Committee or Section 504.” This inconsistent with the same paragraph in Chapter 5 located on page 75 (87).	When formal evaluation is recommended, the school must complete the evaluation process as outlined in the IDEA or Section 504. Procedural safeguards under IDEA and Section 504 must be followed. For more information on procedural safeguards, see Appendix D,	When formal evaluation is recommended, the school must complete the evaluation process as outlined in the IDEA or Section 504. and Section 504 must be followed. For more information on procedural safeguards, see Appendix D,

	<p>IDEA/Section 504 Side-by-Side Comparison, see and TEA’s Parent Guide to the Admission, Review, and Dismissal Process (Parent’s Guide) and the Notice of Procedural Safeguards. or OCR’s Parent and Educator Resource Guide to Section 504 in Public Elementary and Secondary Schools.</p>	<p>IDEA/Section 504 Side-by-Side Comparison, see and TEA’s Parent Guide to the Admission, Review, and Dismissal Process (Parent’s Guide) and the Notice of Procedural Safeguards. or OCR’s Parent and Educator Resource Guide to Section 504 in Public Elementary and Secondary Schools.</p>
<p>Page 23 Commenter requested that the SBOE add the importance of Progress Monitoring. Commenter stated that during any intervention via RTI or under IDEA or elsewhere, including intervention or dyslexia instruction, progress monitoring is vital and the handbook should give examples of free or low cost tools like DIBELS Next so schools understand how easy and important this is to do. Commenter shared an example of a free resource to help. (https://dibels.uoregon.edu/assessment/dibels/dibels-next)</p>	<p>Best Practices in Progress Monitoring It is essential that schools continue to monitor students for common risk factors for dyslexia in second grade and beyond. In accordance with TEC §38.003(a), school districts MUST evaluate for dyslexia at appropriate times. If regular progress monitoring reflects a difficulty with reading, decoding, and/or reading comprehension, it is appropriate to evaluate for dyslexia</p>	<p>Best Practices in Progress Monitoring It is essential that schools continue to monitor students for common risk factors for dyslexia in second grade and beyond. In accordance with TEC §38.003(a), school districts MUST evaluate for dyslexia at appropriate times. If regular progress monitoring reflects a difficulty with reading, decoding, and/or reading comprehension, it is appropriate to evaluate for dyslexia and/or other learning disabilities. Free tools approved by the commissioner of education as of the 2021-2022 school year can assist districts in measuring student’s reading development at first and second grade. For more information on these tools, see the TEA Early Childhood Data Tool Selection Guidance.</p>
<p>On page 45: Under Part I, it states “While an IEP is individualized to the student, in most cases the IEP should address critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency.” The phrase “in most cases” leaves much more wiggle room for IEPs to address the critical evidence-based</p>	<p>While an IEP is individualized to the student, in most cases the IEP should address critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency.</p>	<p>While an IEP is individualized to the student, in most cases the IEP should address critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency.</p>

<p>components of Chapter 4. Could this phrase be removed so the sentence reads as follows? “While an IEP is individualized to the student, the IEP should address critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency.”</p>		
<p>On page 55, at the end of the first paragraph of the section labeled “Providers of Dyslexia Instruction,” we recommend adding a specific statement that a provider of dyslexia instruction does not have to be certified as a special educator when serving a student who also receives special education and related services, if that is the most appropriate person to offer dyslexia instruction.</p>	<p>In order to provide effective intervention, school districts are encouraged to employ highly trained individuals to deliver dyslexia instruction. Teachers, such as reading specialists, master reading teachers, general education classroom teachers, or special education teachers, who provide dyslexia intervention for students are not required to hold a specific license or certification. However, these educators must at a minimum have additional documented dyslexia training aligned to 19 TAC §74.28(c) and must deliver the instruction with fidelity. This includes training in critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency. In addition, they must deliver multisensory instruction that simultaneously uses all learning pathways to the brain, is systematic and cumulative, is explicitly taught, uses diagnostic teaching to automaticity, and</p>	<p>In order to provide effective intervention, school districts are encouraged to employ highly trained individuals to deliver dyslexia instruction. Teachers, such as reading specialists, master reading teachers, general education classroom teachers, or special education teachers, who provide dyslexia intervention for students are not required to hold a specific license or certification. However, these educators must at a minimum have additional documented dyslexia training aligned to 19 TAC §74.28(c) and must deliver the instruction with fidelity. This includes training in critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency. In addition, they must deliver multisensory instruction that simultaneously uses all learning pathways to the brain, is systematic and cumulative, is explicitly taught, uses diagnostic teaching to</p>

	<p>includes both analytic and synthetic approaches. See pages 39 – 41 for a description of these components of instruction and delivery.</p>	<p>automaticity, and includes both analytic and synthetic approaches. See pages 39 – 41 for a description of these components of instruction and delivery. A provider of dyslexia instruction does not have to be certified as a special educator when serving a student who also receives special education and related services if that provider is the most appropriate person to offer dyslexia instruction.</p>
<p>Page 76: Even though spelling is included as a consequence of dysgraphia, it is not a required component of a dysgraphia evaluation. Could this be added to the Academic Skills column in Figure 5.2?</p>	<p>Academic Skills</p> <ul style="list-style-type: none"> • Letter formation • Handwriting • Word/sentence dictation (timed and untimed) • Copying of text • Written expression • Writing fluency (both accuracy and fluency) 	<p>Academic Skills</p> <ul style="list-style-type: none"> • Letter formation • Handwriting • Word/sentence dictation (timed and untimed) • Copying of text • Written expression • Spelling • Writing fluency (both accuracy and fluency)
<p>Page 77 Much of this chapter was copied from Chapter 3 and tweaked slightly. However, Figure 5.3 copied and tweaked the language from the 2014 Revision rather than the current parallel Figure 3.7. Could the questions be changed to mirror the language in Figure 3.7, adapting as appropriate for dysgraphia? Suggested questions are below. (Language from other parts of Chapter 5 was used in addition to language from Figure 3.7.)</p>	<ul style="list-style-type: none"> • Do the data show a pattern of low writing and spelling ability that is unexpected for the student in relation to the student’s other cognitive abilities and provision of effective classroom instruction? • Does the pattern indicate the student has dysgraphia? • Does the student meet eligibility as a student with a disability under Section 504 	<ul style="list-style-type: none"> • Do the data show a pattern of low writing and spelling ability that is unexpected for the student in relation to the student’s other cognitive abilities and provision of effective classroom instruction? • Does the pattern indicate the student has dysgraphia? • Does the student meet eligibility as a student with a disability under Section 504 or IDEA?

<ul style="list-style-type: none"> ○ Do the data show the following characteristics and consequences of dysgraphia? <ul style="list-style-type: none"> ■ Illegible and/or inefficient handwriting due to difficulty with letter formation ■ Difficulty with unedited written spelling ■ Low volume of written output as well as problems with other aspects of written expression ○ Do these difficulties (typically) result from a deficit in graphomotor function (hand movements used for writing) and/or storing and retrieving orthographic codes (letter forms)? ○ Are these difficulties unexpected for the student's age in relation to the student's other cognitive abilities, other developmental or neurological conditions that include motor impairment, and the provision of effective classroom instruction? 	<p>or IDEA?</p>	<ul style="list-style-type: none"> ● <u>Do the data show the following characteristics and consequences of dysgraphia?</u> <ul style="list-style-type: none"> ● <u>Illegible and/or inefficient handwriting with variably shaped and poorly formed letters</u> ● <u>Difficulty with unedited written spelling</u> ● <u>Low volume of written output as well as problems with other aspects of written expression</u> ● <u>Do these difficulties (typically) result from a deficit in graphomotor function (hand movements used for writing) and/or storing and retrieving orthographic codes (letter forms)?</u> ● <u>Are these difficulties unexpected for the student's age in relation to the student's other abilities and the provision of effective classroom instruction?</u>
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**Report of the State Board of Education
Committee on School Finance/Permanent School Fund
Thursday, September 2, 2021**

The State Board of Education Committee on School Finance/Permanent School Fund met at 9:12 a.m. on Thursday, September 2, 2021, in the State Board of Education Room, Room #1-104 of the William B. Travis Building, 1701 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

Present: Tom Maynard, chair; Lawrence A. Allen, Jr., vice chair (virtual); Keven Ellis; Patricia Hardy; Marisa Perez-Diaz

Non-Committee Members Present: Rebecca Bell-Metereau; Will Hickman

Public Testimony

The Committee on School Finance/Permanent School Fund heard public testimony on agenda item #8. Information regarding the individual who presented public testimony is included in the discussion of that item.

DISCUSSION ITEM

1. Per Capita Apportionment Rate for the 2021-2022 School Year
(Board agenda page III-1)

Leo Lopez, associate commissioner, school finance, explained the background of the per capita apportionment rate. Mr. Lopez stated that the preliminary 2021–2022 per capita apportionment rate is set at \$402.428.

ACTION ITEM

2. Proposed Amendment to 19 TAC Chapter 109, Budgeting, Accounting, and Auditing, Subchapter B, Texas Education Agency Audit Functions, §109.25, State Compensatory Education Program Reporting and Auditing System
(Second Reading and Final Adoption)
(Board agenda page III-3)

David Marx, director, financial compliance division, explained that the proposed amendment would update references to statutory citations in 19 Texas Administrative Code (TAC) §109.25 that were renumbered by House Bill (HB) 3, 86th Texas Legislature, 2019. He also explained that no changes were recommended since approved for first reading. He shared that one public comment was received. Mr. Maynard recommended that this item be moved from the consent agenda so that the SBOE could take a record vote for an earlier effective date.

MOTION AND VOTE: *It was moved by Dr. Ellis, seconded by Ms. Perez-Diaz, and carried unanimously to recommend that the State Board of Education approve for second reading and final adoption the proposed amendment to 19 TAC Chapter 109, Budgeting, Accounting, and Auditing,*

Subchapter B, Texas Education Agency Audit Functions, §109.25, State Compensatory Education Program Reporting and Auditing System; and

Make an affirmative finding that immediate adoption of the proposed amendment to 19 TAC Chapter 109, Budgeting, Accounting, and Auditing, Subchapter B, Texas Education Agency Audit Functions, §109.25, State Compensatory Education Program Reporting and Auditing System, is necessary and shall have an effective date of 20 days after filing as adopted with the Texas Register.

DISCUSSION ITEM

3. Review of Permanent School Fund Securities Transactions and the Investment Portfolio (Board agenda page III-8)

David Trice, managing director of investment finance and operations, provided a summary on the status of the Permanent School Fund (PSF) portfolio. Reports presented to the committee were for the reporting period May 1, 2021, through June 30, 2021, unless otherwise noted. Mr. Trice's report included reporting on the current fair market value of the Fund; the asset allocation mix as of June 30, 2021; PSF transactions occurring in the reporting period; revenues and expenditures for the fiscal period beginning September 1, 2020, through June 30, 2021; the activity in the securities lending program for the fiscal period beginning September 1, 2020, through June 30, 2021; the status of transfers from the General Land Office as of June 30, 2021, per approved resolutions; current status of the Bond Guarantee Program and the available capacity in the program; broker commissions on both the internal and external equity portfolios for the period beginning January 1, 2021, through June 30, 2021; fixed income rating changes for the fiscal period September 1, 2020, through June 30, 2021; and short-term cash investments.

ACTION ITEMS

4. Ratification of the Purchases and Sales of the Investment Portfolio of the Permanent School Fund for the Months of May and June 2021 (Board agenda page III-9)

MOTION AND VOTE: *Based on the information provided by staff and the recommendation of the executive administrator and chief investment officer and the commissioner of education, the committee recommended by unanimous consent that the State Board of Education ratify the purchases and sales for the months of May and June 2021, in the amounts of \$1,112,312,733 and \$1,231,656,279, respectively (Attachment A).*

5. Report on Permanent School Fund Liquid Account and Ratification of Purchases and Sales for the Months of May and June 2021 (Board agenda page III-10)

Mr. Trice provided a summary on the status of the PSF Liquid Account. Reports presented to the committee were for the reporting period May 1, 2021, through June 30, 2021. Mr. Trice's report included the current fair market value of the Liquid Account, the asset allocation mix as of June 30, 2021, transfer activity between the General Land Office (GLO) and the Liquid Account, cumulative Income and Realized Gains transferred to the SBOE from the Liquid Account as of June 30, 2021,

transactions occurring in the reporting period, and ratification of the cumulative Purchases and Sales of the Liquid Account from May 1, 2021, through June 30, 2021.

MOTION AND VOTE: *Based on the information provided by staff and the recommendation of the executive administrator and chief investment officer and the commissioner of education, the committee recommended by unanimous consent that the State Board of Education ratify the purchases and sales of the PSF Liquid Account for the period May 1, 2021, through June 30, 2021, in the amounts of \$156,071,850 and \$44,518,526, respectively (Attachment B), and because the Liquid Account transition is almost complete, the committee also recommended by unanimous consent that Permanent School Fund staff be given discretion to prudently move faster to fully invest the Liquid Account.*

6. Determination as to Whether Transfers May be Made from the Permanent School Fund to the Available School Fund

(Board agenda page III-11)

Carlos Veintemillas, deputy chief investment officer and director of fixed income, gave a presentation describing the two constitutional limits on distributions from the PSF. The two tests are that an annual distribution cannot be greater than six percent of the value of the Fund assets and the total amount of distributions from the current and previous nine state fiscal years cannot exceed the total return on the Fund assets over the same period. Mr. Veintemillas stated that both tests were satisfied, allowing for a distribution from the PSF to the Available School Fund for fiscal year 2022.

Mr. Veintemillas stated that Rhett Humphreys, partner, NEPC, LLC, and Keith Stronkowsky, senior consultant, NEPC, LLC, agreed with PSF staff recommendations.

MOTION AND VOTE: *By unanimous consent, the committee recommended that the State Board of Education approve a distribution to the Available School Fund of approximately \$1.731 billion for fiscal year 2022.*

DISCUSSION ITEM

7. Second Quarter 2021 Permanent School Fund Performance Report

(Board agenda page III-12)

Mike Maher, vice president of BNY Mellon Global and Risk Solutions, presented the second quarter of 2021 PSF performance report. Mr. Maher began with an overview of the U.S and foreign capital markets and then reviewed the performance of the Fund for the second quarter of 2021. He stated that the PSF returned 5.74% net of fees for the second quarter outperforming the target benchmark by 58 basis point. Mr. Maher attributed most of the outperformance to Private Equity, Real Estate, and Fixed Income.

Mr. Maher reviewed the second quarter 2021 performance of the PSF by asset class, stating that the total domestic large cap equity composite returned 8.55%, coming flat against its benchmark for the quarter. Mr. Maher added that the Small/Midcap Equity portfolio returned 3.91% in the quarter, equaling its benchmark. He added that international equities returned 5.50% for the quarter, outperforming its benchmark by 10 basis points for the period.

The fixed income portfolio returned 3.21% for the quarter, outperforming its benchmark by 47 basis points. Mr. Maher stated that the Absolute Return composite returned 1.74% for the quarter,

underperforming its benchmark, the HFRI Fund of Funds Composite Index, by 109 basis points. Mr. Maher added that the Real Estate composite returned 3.23% for the quarter, outperforming its benchmark by 132 basis points. He further stated that the Real Return Asset class returned 6.61% for the quarter, underperforming its benchmark by 61 basis points. He added that Emerging Market Debt Local Currency returned 4.40% for the quarter, outperforming its benchmark by 86 basis points. Mr. Maher stated that private equity returned 10.61% for the quarter, outperforming its benchmark by 299 basis points. Finally, he stated that the total emerging market equity composite returned 5.09% for the second quarter 2021, beating its benchmark by 4 basis points.

ACTION ITEM

8. Proposed Amendments to the Investment Procedures Manual (Board agenda page III-13)

Public testimony was provided by the following individual:

NAME: Nicole Krishtal
AFFILIATION: Self

Mr. Veintemillas provided an overview of the amendments to the investment procedures manual. He noted many of the amendments were made due to the addition of the new emerging manager asset class and to incorporate clarifying editorial language edits.

MOTION AND VOTE: *By unanimous consent, the committee recommended that the State Board of Education approve the amendments to the Investment Procedures Manual as presented by staff.*

DISCUSSION ITEMS

9. Review of the Permanent School Fund Emerging Market Debt Asset Class (Board agenda page III-14)

Katie Reissman, managing director of fixed income, gave an update on the emerging market debt asset class and performance history.

10. Review of the Permanent School Fund Public Equities Asset Classes (Board agenda page III-15)

Andrew Bunker, acting director of equities, gave a presentation on the internally and externally managed global public equity program. The presentation covered objectives and guidelines, allocation, construction, strategies, and performance.

11. Review of Senate Bill 1232, 87th Legislature, Regular Session, 2021 and Consideration of Articles of Incorporation for the Permanent School Fund Corporation

(Board agenda page III-16)

John Grubenman, director of private markets, and Chuck Campbell, fiduciary counsel, gave a presentation on Senate Bill 1232 that summarized the law, explained the implementation, and described the process needed for the board to create the PSF Corporation (Corporation). Mr. Grubenman and Mark Shewmaker, managing director of special projects and portfolio manager, also addressed many of the operational needs of the Corporation.

Mr. Campbell provided an overview of the draft certificate of formation of the Corporation, which would serve as the articles of incorporation, and answered questions about the document.

12. Discussion of Proposed Amendments to 19 TAC Chapter 33, Statement of Investment Objectives, Policies, and Guidelines of the Texas Permanent School Fund, Subchapter A, State Board of Education Rules

(Board agenda page III-17)

Holland Timmins, executive administrator and chief investment officer, stated that the agenda item was for discussion only and amendments to be proposed will include terms for SBOE members serving on the PSF Corporation board and bond guarantee program updates.

Mr. Timmins anticipated that the item would be presented at the next meeting for first reading and filing authorization.

13. Report of the Permanent School Fund Executive Administrator and Chief Investment Officer

(Board agenda page III-66)

Mr. Timmins provided the committee an update regarding the PSF Intern Program, scheduling efforts for the joint annual School Land Board/SBOE meeting, and the Bond Guarantee Program.

The meeting of the Committee on School Finance/Permanent School Fund adjourned at 12:43 p.m.

**TEXAS PERMANENT SCHOOL FUND
SUMMARY OF TRANSACTIONS FOR APPROVAL
(Including External Manager's Trades)
For May 1, 2021 through June 30, 2021**

Purchases/Capital Calls:

Long Term Fixed Income	\$ 370,679,182
Public Market Equities	348,277,673
Alternative Investments	<u>393,355,878</u>
 TOTAL	 <u><u>\$ 1,112,312,733</u></u>

Sales/Distributions:

Long Term Fixed Income	\$ 156,058,173
Public Market Equities	295,161,389
Alternative Investments	<u>780,436,717</u>
 TOTAL	 <u><u>\$ 1,231,656,279</u></u>

General Land Office Contributions:

FY 2020 Cumulative June 2020	FY 2021 Cumulative June 2021
\$7,500,000	\$33,750,000

Based on the above information provided by staff including a report that deposits to the Permanent School Fund from the General Land Office were \$7,500,000 through June 2020 for fiscal year 2020 versus \$33,750,000 through June 2021 for fiscal year 2021, and the recommendation of the Executive Administrator and Chief Investment Officer and the Commissioner of Education; it is moved by unanimous consent that the Committee on School Finance/Permanent School Fund ratify for the months of May 2021 and June 2021 Permanent School Fund portfolio purchases of \$1,112,312,733 and sales of \$1,231,656,279.

**TEXAS PERMANENT SCHOOL FUND
SUMMARY OF TRANSACTIONS FOR APPROVAL
FOR PSF LIQUID ACCOUNTS
For May 1, 2021 through June 30, 2021**

Purchases:

Fixed Income	\$ 69,620,345
Public Market Equities	<u>86,451,505</u>
TOTAL	<u><u>\$ 156,071,850</u></u>

Sales:

Fixed Income	\$ 28,435,016
Public Market Equities	<u>16,083,510</u>
TOTAL	<u><u>\$ 44,518,526</u></u>

Based on the above information provided by staff and the recommendation of the Executive Administrator and Chief Investment officer and the Commissioner of Education: It is moved by unanimous consent that the Committee on School Finance/Permanent School Fund ratify for the period May 1, 2021 through June 30, 2021 Permanent School Fund Liquid Account purchases of \$156,071,850 and sales of \$44,518,526.

**Report of the State Board of Education
Committee on School Initiatives
Thursday, September 2, 2021**

The State Board of Education Committee on School Initiatives met at 9:02 a.m. on Thursday, September 2, 2021, in Room #1-111 of the William B. Travis Building, 1701 N. Congress Avenue, Austin, Texas. Attendance was noted as follows:

Present: Matt Robinson, chair; Aicha Davis, vice chair; Ruben Cortez, Jr; Will Hickman; Jay Johnson

Public Testimony

The Committee on School Initiatives heard public testimony on agenda item #5. Information regarding the individuals who presented public testimony is included in the discussion of that item.

The Committee on School Initiatives considered items in the following order: Item number 2, 3, 4, 1, 5.

ACTION ITEMS

1. Recommendation for Reappointment to the Boys Ranch Independent School District Board of Trustees

(Board agenda page IV-1)

Christopher Lucas, director, policy, planning, and operations, explained that one term on the board of trustees for Boys Ranch Independent School District (ISD) is expiring. The president and chief executive officer, Mr. Dan Adams, has recommended that Mr. James Taylor be reappointed to a two-year term.

MOTION AND VOTE: *It was moved by Mr. Cortez, seconded by Mr. Hickman, and carried unanimously to recommend that the State Board of Education approve the reappointment of Mr. James Taylor to serve a two-year term of office from September 3, 2021, to September 3, 2023, on the Boys Ranch ISD Board of Trustees.*

2. Approval of Special Purpose School District Advisory Board Members for Texas Tech University K-12

(Board agenda page IV-12)

Monica Martinez, associate commissioner, standards and support services, explained that in compliance with State Board of Education rule, Texas Tech University (TTU) K-12 submitted its nominees to serve as members of the district advisory board for TTU K-12. Appointees will serve for staggered three-year terms.

MOTION AND VOTE: *It was moved by Dr. Johnson, seconded by Mr. Hickman, and carried unanimously to recommend that the State Board of Education approve the appointment of nominees submitted by Dr. Lawrence Schovanec, President, Texas Tech University, to serve a two-year term of office from September 3, 2021, to September 3, 2023, on the TTU K-12 advisory board.*

(Mr. Cortez was absent for the vote).

3. Approval of Special Purpose School District Advisory Board Members for University of Texas at Austin High School
(Board agenda page IV-15)

Ms. Martinez explained that in compliance with State Board of Education rule, The University of Texas (UT) at Austin High School had also submitted its nominees to serve as members of the district advisory board for UT Austin High School.

MOTION AND VOTE: *It was moved by Dr. Johnson, seconded by Mr. Hickman, and carried unanimously to recommend that the State Board of Education approve the appointment of nominees submitted by UT Austin High School to serve two-year terms of office from September 3, 2021, to September 3, 2023, on the UT Austin High School advisory board.*

(Mr. Cortez was absent for the vote).

DISCUSSION ITEMS

4. Discussion of Required School Safety Training for District Trustees
(Board agenda page IV-17)

Ms. Martinez explained that House Bill 690, passed by the 87th Texas Legislature, Regular Session, 2021, requires the SBOE, in coordination with the Texas School Safety Center, to develop the curriculum and materials for school safety training to be completed by school district trustees. Dr. Kathy Martinez-Prather, director of the Texas School Safety Center, provided an overview of the proposed content for the school safety training curriculum.

5. Open-Enrollment Charter School Generation 27 Application Updates
(Board agenda page IV-18)

Marian Schutte, director, charter school authorizing and administration division, presented information on the Generation 27 Open-Enrollment Charter Application cycle, content, improvements, and timeline. Ms. Schutte answered questions regarding the application process.

Public testimony was provided virtually by the following individual:

NAME: Timothy Mattison
AFFILIATION: Self

The meeting of the Committee on School Initiatives adjourned at 10:30 a.m.

