

CHAPTER 5: END-OF-COURSE ASSESSMENTS

Overview

History of EOC Development

Beginning in fall 1990, Texas began administration of a criterion-referenced testing program called the Texas Assessment of Academic Skills (TAAS). This program assessed student proficiency in reading, mathematics, writing, and, beginning in 1994, science and social studies. Passing the exit level tests in reading, writing, and mathematics at grade 10 was a requirement for graduation.

In 1995, the inclusion of end-of-course (EOC) assessments as an option for meeting the graduation requirement was enacted by the 74th Texas Legislature. Between 1995 and 2002, EOC assessments were given in four courses: Algebra I, biology, English II, and U.S. history. Students could satisfy their graduation testing requirement either by passing the TAAS exit level tests or by passing the Algebra I EOC assessment, the English II EOC assessment, and either the biology or U.S. history EOC assessment.

In 1999, legislation was enacted requiring the development of a new, expanded, criterion-referenced testing program, the Texas Assessment of Knowledge and Skills (TAKS). The TAKS testing program replaced the TAAS program beginning with the 2002–2003 academic year. With the exception of Algebra I, which remained a voluntary and operational assessment, state-developed EOC assessments were no longer administered after spring 2002.

On December 16, 2005, Governor Rick Perry issued Executive Order RP53, which called for increased college readiness programs in Texas public schools and authorized “the development of a series of voluntary end-of-course assessments in Science, Mathematics, and other subjects, currently assessed by the 11th grade Texas Assessment of Knowledge and Skills, to measure student performance....” As a result of Executive Order RP53, the Student Assessment Division of TEA began development of EOC assessments in geometry, biology, chemistry, physics, and U.S. history and reestablished development for Algebra I.

The Student Assessment Division of TEA is currently developing the assessments authorized in this executive order and plans to field-test and implement them over the course of the next three years. Under RP53, EOC assessments have been developed, or are in development, for Algebra I, geometry, biology, chemistry, U.S. history, and physics.

Figure 7 reflects the planned implementation schedule.

Figure 7. EOC Implementation Schedule

EOC Assessment	Spring 2007	Spring 2008	Spring 2009	Spring 2010
Algebra I	Already implemented	→ → → →	→ → → →	→ → → →
Biology	Field-tested	Implement	→ → → →	→ → → →
Geometry	Field-tested	Implement	→ → → →	→ → → →
Chemistry		Field-test	Implement	→ → → →
U.S. History		Field-test	Implement	→ → → →
Physics			Field-test	Implement

Eligibility

Any student enrolled in a course in which an EOC assessment is offered is eligible to participate in testing, regardless of grade level. Participation in operational tests—those already implemented—is currently voluntary in each district. If a district chooses to participate in testing, it has the flexibility to select participation on a district, campus, and individual student basis.

Administration of EOC

The EOC assessments test students’ knowledge and skills in a course of study specified within the curriculum. These knowledge and skills are defined by the student expectations listed in the Texas Essential Knowledge and Skills (TEKS). Because the assessments are designed to be given at the end of the course, the majority of the student expectations are eligible for testing. Students may be given an EOC assessment upon completing the course of study.

EOC assessments are administered in the spring semester only and, currently, are only administered online through PEM’s eMeasurement testing system. No retests are offered for EOC assessments because they are not used for high-stakes decisions about individual students and are not used for state accountability reporting.

Development Activities for EOC

Maintaining a student assessment system of the highest quality involves completing a set of tasks that must be executed during the test development process. The procedures described in Chapter 6: Annual Test Development Activities generally outline the steps used to develop a framework for each EOC assessment and explain ongoing development. TEA involves educators at each step in the development process because it is believed that the development of EOC assessments is a responsibility that has to be shared in order to ensure an equitable and accurate measure of learning for Texas public school students.

In order to provide educators with the same online testing conditions experienced by students, all educator item reviews and data reviews are conducted in an online test environment. Committee members are provided with laptop computers on which to review the test items. Before reviewing items, the group is given an overview of how to navigate the

test delivery environment and an opportunity for a hands-on experience with the tools that are used on the test.

Field Testing

During the initial year of field testing for each EOC assessment, a stand-alone field test is conducted for each subject. It is important to note that although participation in the live assessment is currently voluntary, participation in stand-alone field tests is required for selected campuses. The mandatory field test helps ensure that the sample is large enough to satisfy statistical requirements for item analysis. Initial field testing for biology and geometry was conducted in spring 2007 using stand-alone field tests. Initial field testing for chemistry and U.S. history will be conducted in spring 2008 through stand-alone field testing. After the initial year for these EOC assessments, all field-test items will be embedded within the operational test forms. The Algebra I EOC Assessment has 10 embedded field-test items within the operational test form.

Data Review

Chapter 6: Annual Test Development Activities provides specific detail regarding the data review committees for the Texas student assessment program. Because the EOC assessments are delivered online only, the procedures to be used by the data review committee members were revised to reflect the online delivery format.

EOC Online Testing

In 2006–2007, the EOC assessments were delivered via the eMeasurement online testing system. This section briefly describes the online delivery system and provides data on the number of EOC tests administered in that school year.

The Online Test Delivery System

All online testing described in this chapter was delivered using the eMeasurement online testing system. This system provides a comprehensive set of secure online tools for authoring, delivering, and reporting results of tests and has been developed to meet the stringent requirements of the Texas student assessment program and protect the integrity of test items and student data.

Several key elements have been included in the system's design so that it meets the needs of the state's programs. The system was designed to take advantage of existing hardware and software that are already installed in schools. Access is controlled through user IDs and passwords. All transmissions are encrypted, and no test questions or responses are stored on the local workstation when testing concludes. Once a testing session has started, the software locks down the workstation to prevent items from being copied, printed, or e-mailed and to prohibit the use of unauthorized applications. Students can access formula charts, calculators, or other required aids, as determined for each test. When an item includes a reading passage or other stimulus, the passage or stimulus appears on the screen together with the item, or it is displayed in a separate window.

The system also allows test administrators to control which tests will be administered when, and which students will be in each testing session. While the test is in progress, a student's current status can be monitored from the test administrator's workstation. Further information about the eMeasurement system, including an overview of the system, information on delivery and reporting, and a list of frequently asked questions, can be found at <http://etesttx.com/Resources>.

Table 5 details the EOC assessments administered in 2006–2007.

Table 5. 2006–2007 EOC Assessments Administered

Test Administration	Online Tests Administered
Mandatory Administrations	
Spring 2007 Biology EOC FT	67,217
Spring 2007 Geometry EOC FT	64,435
Total	131,652
Voluntary Administrations	
Spring 2007 Algebra I EOC Assessment	33,397
Total	33,397
Total 2006–2007 EOC Assessments	165,049

Spring 2007 Survey Analyses

Each student who took an EOC assessment was provided the opportunity to complete a survey about the online testing experience immediately after the completion of the test. The survey automatically appeared as a separate section of the test following the last test question. Additionally, an e-mail sent to test administrators shortly after the testing period ended contained a link to an online survey.

In general, the student responses tended to be very positive. Students found the online program used to administer the test easy to use (65–75%), and most students said that they enjoyed using the computer to take the test (60–70%). More than 90% of the test administrators reported that students seemed prepared to take the assessment on computer and were comfortable navigating the testing software and using the online tools. Approximately half of the administrators recommended expanding online testing for statewide assessments.

Detailed results from the surveys can be found in the “End-of-Course Assessments Post-Test Surveys” report in the 2007 Texas Education Agency Technical Report Series, which can be found at <http://www.tea.state.tx.us/student.assessment/resources/techdig07/index.html>.

EOC Standards and Scale

The Algebra I EOC Assessment was administered in the current online format for the first time in spring 2005. In November 2005, following that administration, TEA and

PEM convened a group of 22 panelists to recommend performance standards—specifically, Met Standard and Commended Performance—for the Algebra I EOC Assessment. After standard setting, a unique scale transformation was applied so that the resulting scale scores have the panel-recommended Met Standard performance level cut at a scale score of 1100 and the panel-recommended Commended Performance performance level cut at a scale score of 1400. The raw score to scale score conversion table for the 2007 Algebra I EOC Assessment can be found on the TEA Student Assessment Division website at http://www.tea.state.tx.us/student.assessment/scoring/convtables/2007/eoc/Algebra_2007_Raw_Score_Conversion_Table_tagged.pdf.

Detailed information about the standard-setting process for the Algebra I EOC Assessment can be found in Chapter 14: Standards. Standard-setting meetings for other EOC assessments will occur in the coming years.

New Legislation and the Future of EOC

In May 2007, the Texas state legislature enacted Senate Bill 1031, expanding the role of the EOC assessment program. The bill phases out TAKS for grades 9 through 11 and replaces them with the EOC assessments as a component of the new graduation requirements, beginning with the freshman class of 2011–2012. In addition, the bill authorizes the development of the following six additional EOC assessments:

- Algebra II
- World Geography
- World History
- English I
- English II
- English III

The TEA Student Assessment Division is beginning the development of these additional assessments and planning the implementation of the new legislation.

