Section 3 - TREx XML Standards

Overview

XML schemas function as models for describing the structure of the records being extracted and transmitted through TREx. This includes:

- the sequence in which elements appear;
- the interrelationship between different elements, including parent and child relationships and nesting levels; and
- the types of data that are contained in elements or attributes.

The *TREx Data Standards* manual provides information on the data elements, coded variables, and schema for use by the districts and vendors of local student information systems for the development and maintenance of the extract file process.

> ***Note***: *Similar to the TREx Data Standards, the TREx XSD will be updated and republished by TEA annually. Student Information System (SIS) vendors should support updates to the TREx XSD.*

Edits and Validations

The TREx XML schema ensures that student data files from school districts adhere to a common structure and consist of valid elements and attributes. An XML extract file must be syntactically perfect, or it is rendered as unacceptable by an XML parser.

Restrictions control acceptable values for XML data elements. Restrictions on XML elements are called facets. In combination with an element's declared data type, restrictions enable the XSD validation process not only to validate the structure of the XML file but also to validate the data values contained within the file against its XML schema definition.

An example of a restriction to validate data commonly used in TREx is for a range of years. To define a rule for the ACADEMIC-YEAR data element so that the values fall within the range of 1957-2020, the TREx schema declares the restriction as:

```
<xs:element name="SchoolYear">
  <xs:simpleType>
   <xs:restriction base="xs:integer">
      <xs:minInclusive value="1957"/>
      <xs:maxInclusive value="2020"/>
    </xs:restriction:
   </xs:simpleType>
</xs:element>
```

The XML schema also enforces length restrictions for a given element by either an exact length, minimum length, or maximum length. Patterns represent another restriction on data elements if so defined.

TREx Field Edit Overview

Although the districts/campuses are provided with a manual capability to create a student record or transcript in TREx, most districts/campuses submit data in an XML-based extract file. The file is referred to as an extract file because it is created through a vendor-supported process that extracts data from a district's student information system. The extracted data must be consistent with the TREx XML Schema Definition (XSD).

Prior to transmitting the extract file, TREx verifies the structure of the file against the XSD. In addition, the system verifies the contents of the file against the declared data types and restrictions defined for each element in the TREx XSD for each simple type element. The data types and restrictions defined with the TREx XSD constitute the TREx field edits.

TREx Field Edit Restrictions

As previously described in this section, restrictions control acceptable values for XML data elements. Restrictions on XML elements are called facets. In combination with an element's declared data type, restrictions enable the TREx XSD validation process not only to validate the structure of the XML file but also to validate the data values contained within the file against its XML schema definition. Many simple type elements within the TREx XSD have a restriction that limits the domain of acceptable values.

TREx does not transmit extract files improperly structured or containing unacceptable values.

Available TREx XSD Restrictions

Restriction	Description
enumeration	Specifies a list of acceptable values.
minInclusive	Specifies the lower bounds for numeric values. The value must be greater than or equal to this value.
maxInclusive	Specifies the upper bounds for numeric values. The value must be less than this value.
minLength	Specifies the minimum number of characters or list items allowed. Must be equal to or greater than zero.
maxLength	Specifies the maximum number of characters or list items allowed. Must be equal to or greater than zero.
minOccurs	Specifies minimum number of occurrences allowed.
maxOccurs	Specifies maximum number of occurrences allowed.
pattern	Defines the exact sequence of characters that are acceptable.
restriction	Defines the type of data element (e.g. string, integer, etc.).
totalDigits	Specifies the exact number of digits permitted. (Value must be greater than zero.)
whiteSpace	Specifies the use of white space. Denotes line feeds, tabs, spaces, and carriage returns.

Context Edit Overview

TREx uses context edits to verify data elements against the rules set out in the XSD. Each context edit is traced to its associated Edit Number, a description of which follows.

Context Edit Descriptions

Following is a list of TREx Context Edits.

Edit #	Element XML Name	Edit Rule
T001	StudentID	The first character of StudentID must be "S" or "0"-"8".
T002	StudentID	Each character of StudentID must not be the same number.
T003	StudentID	The first three characters of StudentID must not be "000".
T004	StudentID	If first character of StudentID is not an "S", the fourth and fifth characters must not be "00".
T005	StudentID	If first character of StudentID is not an "S", the last four characters must not be "0000".
T006	FirstName, MiddleName, LastName	The FirstName, MiddleName, and/or LastName must only contain the following characters: • a-z or A-Z • 0-9 • Apostrophe • Hyphen • Space character
T007	FirstName, MiddleName, LastName	Name must not contain only apostrophes.
T008	FirstName, MiddleName, LastName	Name must not contain only hyphens.
T009	FirstName, LastName	Name must not contain only spaces.
T010	FirstName, MiddleName, LastName	Data elements cannot be repeated as PersonType (student).
T011	FirstName, MiddleName, LastName	Data elements can be repeated as ParentType (parent) up to 9 times.
T012	DistrictID	The DistrictID contained within the CampusID must match an entry registered with the TEA.
T013	CampusID	The CampusID must match an entity registered with TEA.
T014	EntryDate	The EntryDate must not be greater than the file submission date.
T015	WithdrawDate	WithdrawDate must not be greater than the current date.
T016	WithdrawDate	WithdrawDate must be greater than ExitDate by at least one day.
T017	ExitDate	ExitDate must be one day less than (earlier) than WithdrawDate.
T018	WithdrawDate, WithdrawReason	If a student in grades 7-12 has withdrawn from school, both fields are required. For grades up to and

Edit #	Element XML Name	Edit Rule
		including grade 6, Withdraw Reason is not required for students who have withdrawn from school, but Withdraw Date is required and entered.
T019	DisciplineActionDate	Must be greater than date of extract file creation.
T020	DisciplineActionDate, DisciplineActionCode, DisciplineActionReason	If data are present for any single element, all other elements must include data.
T021	DisciplineActionDate, DisciplineActionCode, DisciplineActionReason	Elements can be repeated on student record if at least one element contains different data from other set.
T022	TestScore, TestDate,TestCode	If TestDate (Assessment Date) is present, data are required in TestScore (Assessment Score) and/or TestCode (Assessment Score Code).
T023	GradeRetained	Must be less than Grade 9.
T024	CertificateDate	Must be blank if date exists in GraduationDate element.
T025	GraduationDate	Must be blank if date exists in CertificateDate element.
T027	ImmunizationDate	If present, data are required for ImmunizationCode.
T028	CreditCampus	CreditCampus must match an entity registered with TEA.

Data and File Requirements

The TREx extracted data are stored in an XML-based file consistent with the TREx XML Schema Definition (XSD) and must follow the XSD standards to be transmitted by TREx.

Rules for XML Schema

While school districts and campuses are responsible for the accuracy of the data transmitted through TREx, TREx verifies the contents of the file against the declared data types and restrictions defined for each element in the TREx XSD. The following business rules apply to XML schemas and the XSD validation process:

- The XML Schema supports a number of built-in data types (e.g., date). When an XML element has a defined data type, a restriction is placed on the element content.

- The XML Schema supports restrictions (edits). In conjunction with the element's declared data type, restrictions are used to control acceptable values for XML elements.

- Declared data types and restrictions enable the XSD validation process.

- The client-side XSD validation process is used to validate the XML file structure and data values against the schema definition.

- If the client-side validation fails, TREx does not transfer the extract file.

   Note: For graphical representations of the TREx XSD, reference Appendix C.

TREx XSD Data Types and Restrictions

Following are the TREx data types and restrictions. Restrictions control acceptable values for XML elements. Restrictions used in the XSD validation process validate both the structure of the XML file and the data values against the XML Schema Definition.

Element Name	XML Name	Data Type	Restriction
StudentIdentificationType			
Student ID	StudentID	String	• Required element. Public Schools: • The only acceptable value for the first position is an "S" or a character in the range of 0 to 8. • For positions two through nine, the only acceptable value is eight characters in a sequence with each character in a range from 0 to 9. Private Schools: • The minimum length is 1 and the maximum length is 64 characters.
TX Student Unique ID	StudentUniqueID	String	• Required if available. • 10-digit numeric value.
(Student) First Name	FirstName	String	• Required element. • Limited to a single occurrence. • The minimum length is 1 and the maximum length is 30 characters. • White space is preserved. • The only acceptable value is a sequence of at least 1 to 30 characters with each character either a lower-case a through z, upper-case A through Z, an apostrophe, a hyphen, a 0 through 9, or a space.
(Student) Middle Name	MiddleName	String	• Optional element. • Limited to a single occurrence. • The minimum length is 1 and the maximum length is 30 characters. • White space is preserved. • The only acceptable value is a sequence of at least 1 to 30 characters with each character either a lower-case a through z, upper-case A through Z, an apostrophe, a hyphen, a 0 through 9, or a space.

Element Name	XML Name	Data Type	Restriction
(Student) Last Name	LastName	String	• Required element. • Limited to a single occurrence. • The minimum length is 1 and the maximum length is 40 characters. • White space is preserved. • The only acceptable value is a sequence of at least 1 to 40 characters with each character either a lower-case a through z, upper-case A through Z, an apostrophe, a hyphen, a 0 through 9, or a space.
(Student) Generation Code	Suffix	String	• Optional element. • Maximum length of a single character. • If provided, the only acceptable value is a single character in a rank from 1-9, A- C.
Prior ID	PriorID	String	• Optional element. • If provided, minimum length of 1 and a maximum length of 9. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWX YZabcdefghijklmnopqrstuvwxyz01234 56789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Local Student ID	LocalID	String	• Optional element. • If provided, minimum length of 1 and a maximum length of 9. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWX YZabcdefghijklmnopqrstuvwxyz01234 56789 ~! @ # $ % ^ & * ( ) _ + = : ; " ' , . / < > ?
(Student) Address	Address	String	• Optional element. • Maximum length of fifty characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZa bcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?

Element Name	XML Name	Data Type	Restriction
(Student) City	City	String	• Optional element. • Maximum length of thirty characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
(Student) State	StateProvince	String	• Optional element. • Maximum length of two characters. • The only acceptable values are listed in Code Table TC20.
(Student) Country	Country	String	• Optional element. • Maximum length of two characters. • The only acceptable values are listed in Code Table TC04. • Should default to US.
(Student) Zip	PostalCode	String	• Optional element. • Minimum length of five and a maximum length of ten characters. • If ten characters provided, must include a hyphen in position six.
Parent			
(Parent) First Name	FirstName	String	• Required element. • The minimum length is 1 and the maximum length is 30 characters. • White space is preserved. • Limited to nine occurrences. • The only acceptable value is a sequence of at least 1 to 30 characters with each character either a lower-case a through z, upper-case A through Z, an apostrophe, a hyphen, a 0 through 9, or a space.
(Parent) Middle Name	MiddleName	String	• Optional element. • Maximum length is 30 characters. • White space is preserved. • The only acceptable value is a sequence of at least 0 to 30 characters with each character either a lower-case a through z, upper-case A through Z, an apostrophe, a hyphen, a 0 through 9, or a space.

Element Name	XML Name	Data Type	Restriction
(Parent) Last Name	LastName	String	• Required element. • The minimum length is 1 and the maximum length is 40 characters. • White space is preserved. • Limited to nine occurrences. • The only acceptable value is a sequence of at least 1 to 40 characters with each character either a lower-case a through z, upper-case A through Z, an apostrophe, a hyphen, a 0 through 9, or a space.
(Parent) Generation Code	Suffix	String	• Optional element. • Maximum length of a single character. • If provided, the only acceptable value is a single character in a rank from 1-9, A-C.
StudentDemographic			
Gender Code	Gender	String	• Required element. • Limited to a single occurrence. • Maximum length of a single character. • The only acceptable value is one of the following letters: "M" or "F".
Ethnicity Code	Race	String	• Required for Students prior to 2010-2011 School Year. • Limited to a single occurrence. • Maximum length of a single character. • The only acceptable value is a single character in a range from 1 to 5.
American Indian-Alaska Native	AmericanIndianAlaskaNativeCode	String	• The only acceptable values are listed in Code Table TC16 (0/1) • Maximum length of one character. • Optional element.
Asian	AsianCode	String	• The only acceptable values are listed in Code Table TC16 (0/1) • Maximum length of one character. • Optional element.
Black-African Americican	BlackAfricanAmericicanCode	String	• The only acceptable values are listed in Code Table TC16 (0/1) • Maximum length of one character. • Optional element.
Native Hawaiian-Pacific Islander	NativeHawaiianPacificIslanderCode	String	• The only acceptable values are listed in Code Table TC16 (0/1) • Maximum length of one character. • Optional element.

Element Name	XML Name	Data Type	Restriction
White	WhiteCode	String	• The only acceptable values are listed in Code Table TC16 (0/1) • Maximum length of one character. • Optional element.
Hispanic-Latino	HispanicLatinoCode	String	• The only acceptable values are listed in Code Table TC16 (0/1) • Maximum length of one character. • Optional element.
Date of Birth	BirthDate	Date	• Required element. • Limited to a single occurrence. • The date type implements an ISO data type in the form of YYYY-MM_-DD. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01-01 and less than 2040-01-01.
Home Language	Language	String	• Optional element. • Maximum length of two characters. • The only acceptable values are listed in Code Table TC14.
Migrant Indicator	Migrant	String	• Optional element. • Maximum length of one character. • The only acceptable value is a single character of 0 or 1.
Foster Care Indicator Code	FosterCare	String	• Optional element. • Maximum length of one character. • The only acceptable values are listed in Code Table TC33
Military Connected	MilitaryConnected	String	• Optional element. • Maximum length of one character. • The only acceptable values are listed in Code Table TC34
Dyslexia Indicator Code	Dyslexia	String	• The only acceptable values are listed in Code Table TC16 (0/1) • Maximum length of one character. • Optional element.
Homeless Indicator	Homeless	String	• Optional element. • Maximum length of one character. • The only acceptable values are listed in Code Table TC32.
Unschooled Asylee/Refugee Code	AsyleeRefugee	String	• Optional element. • Maximum length of one character. • The only acceptable value is a single character of 0,1 or 2.
School			

Element Name	XML Name	Data Type	Restriction
Campus ID	SchoolID	String	• Required element. • Minimum length of nine characters. • Must be valid TEA-approved campus identification number. • Declared as a string data type to allow for zeros in the first position. • The only acceptable value is nine characters in a sequence with each character in a range from 0 to 9.
Campus Name	SchoolName	String	• Required data element. • Maximum length of thirty-four characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789
District ID	DistrictID	String	• Required element. • Minimum length of six characters. • Must be valid TEA-approved district identification number. • Declared as a string data type to allow for zeros in the first position. • The only acceptable value is six characters in a sequence with each character in a range from 0 to 9.
District Name	DistrictName	String	• Optional element. • Maximum length of thirty-four characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ? • May not include the following characters: \ {} [ ]	

Element Name	XML Name	Data Type	Restriction
(Campus) Address	Address	String	• Optional element. • Maximum length of fifty characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
(Campus) City	City	String	• Optional element. • Maximum length of thirty characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
(Campus) State	StateProvince	String	• Optional element. • Maximum length of two characters. • The only acceptable values are listed in Code Table TC20.
Country	Country	String	• Optional element. • Maximum length of two characters. • The only acceptable values are listed in Code Table TC04. • Should default to US.
(Campus) Zip	PostalCode	String	• Optional element. • Minimum length of five and a maximum length of ten characters. • If ten characters provided, must include a hyphen in position six.
(Campus) Phone	PhoneNumber	String	• Required element. • Maximum length of twenty characters. • White space is preserved. • Any of the following characters, including the space character, are valid: EXText0123456789 # () -

Element Name	XML Name	Data Type	Restriction
(Campus) Fax	Fax	String	• Optional element. • Maximum length of twenty characters. • White space is preserved. • Any of the following characters, including the space character, are valid: EXText0123456789 # () -
Enrollment			
Grade Level	GradeLevel	String	• Required element. • Maximum length of two characters. • The only acceptable value is EE, PK, KG, and 01 through 12.
Original Entry Date	EntryDate	Date	• Optional element. • Record must contain only one. • The date type implements an ISO data type in the form of YYYY-MM-DD. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01-01 and less than 2040-01-01.
Last Date of Attendance	ExitDate	Date	• Optional element. • Record may contain only one. • The date type implements an ISO data type in the form of YYYY-MM-DD. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01-01 and less than 2040-01-01.
Last Withdrawal Date	WithdrawDate	Date	• Optional element. • Record may contain only one. • The date type implements an ISO data type in the form of YYYY-MM-DD. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01-01 and less than 2040-01-01.
Withdrawal Reason	WithdrawReason	String	• Optional element. • Maximum length of two characters. • The only acceptable values are listed in Code Table TC23.
Placed in Grade	GradePlaced	String	• Optional element. • Maximum length of two characters. • The only acceptable value is EE, PK, KG, and 01 through 12.

Element Name	XML Name	Data Type	Restriction
Promoted to Grade	GradePromoted	String	• Optional element. • Maximum length of two characters. • The only acceptable value is EE, PK, KG, and 01 through 12.
Grade of Retention (PK-8)	GradeRetained	String	• Optional element. • Maximum length of two characters. • The only acceptable value is EE, PK, KG, and 01 through 12.
SpecialPrograms			
LEP (Limited English Proficiency) Indicator	LEP	String	• Optional element. • Maximum length of one character. • The only acceptable values are 0, 1, F, or S.
Economically Disadvantaged Indicator	EconomicDisadvantaged	String	• Optional element. • Maximum length of two characters. • The only acceptable values are listed in Code Table TC08.
At Risk Indicator	AtRisk	String	• Optional element. • Maximum length of one character. • The only acceptable value is a single character of 0 or 1.
Title I Part A Indicator	TitleI	String	• Optional element. • Maximum length of one character. • The only acceptable value is a single character of 0, A, 6, 7, 8, or 9.
Special Education Indicator	SpecialEd	String	• Optional element. • Maximum length of one character. • The only acceptable value is a single character of 0 or 1.
IEP (Individualized Education Program) Indicator	IEP	String	• Optional element. • Maximum length of one character. • The only acceptable value is a single character of 0 or 1.
Bilingual Indicator	Bilingual	String	• Optional element. • Maximum length of one character. • If provided, the only acceptable values are 0, 2, 3, 4, or 5.
ESL (English as Second Language) Indicator	ESL	String	• Optional element. • Maximum length of one character. • The only acceptable values are 0, 2, or 3.
Gifted/Talented Indicator	GiftedTalented	String	• Optional element. • Maximum length of one character. • If provided, the only acceptable value is a single character in a rank from 0 through 2

Element Name	XML Name	Data Type	Restriction
Career Tech Ed Indicator	CTE	String	• Optional element. • Maximum length of one character. • If provided, the only acceptable value is a single character of 0 through 3.
Personal Graduation Plan	PersonalGradPlan	String	• Optional element. • Maximum length of one character. • The only acceptable value is a single character of 0 or 1.
Assessment			
Assessment Name	TestName	String	• Optional element. • May be repeated for each assessment. • Maximum length of two digits. • If provided, the only acceptable values are listed in Code Table TC01. • If provided, then the TestDate and TestScore or TestCode are required. • If provided, then AdditionalTestName must be blank within each assessment.
Assessment Grade Level	TestLevel	String	• Optional element. • May be repeated for each assessment. • Maximum length of two characters. • If provided, the only acceptable values are listed in Code Table TC12.
Assessment Date	TestDate	Date	• Optional element. • May be repeated for each assessment. • If provided, then TestName and TestScore or Test Code are required. • Maximum length of seven characters. • The date type implements an ISO data type in the form of yyyy-mm. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01 and less than 2040-01. • For STAAR® EOC, mm value 13 indicates Fall, 15 indicates Spring and 16 indicates Summer testing windows.

Element Name	XML Name	Data Type	Restriction
Assessment Date Exit Requirement Met	ExitRequirementMet Date	Date	• Optional element. • May be repeated for each assessment. • Maximum length of seven characters. • The date type implements an ISO data type in the form of yyyy-mm. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01 and less than 2040-01.
Assessment Score	TestScore	String	• Optional element. • May be repeated for each assessment. • If provided, then TestName or AdditionalTestName and TestDate are required. • Maximum length of six characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Assessment Score Code	TestCode	String	• Optional element. • May be repeated for each assessment. • If provided, then TestName or AdditionalTestName and TestDate are required. • Maximum length of a single character. • The only acceptable values are listed in Code Table TC02.
STAAR Performance Level	PerformanceLevel	String	• Optional Element • May be repeated for each assessment. • If provided, then TestName or AdditionalTestName and TestDate are required. • Maximum length of a single character. • The only acceptable values are listed in Code Table TC31.
Additional Test Name	AdditionalTestName	String	• Optional element • If provided, then TestName must be blank within each Assessment. • Maximum length of 60 characters • If provided, then the TestDate and TestScore or TestCode are required.

Element Name	XML Name	Data Type	Restriction
Assessment Subtest	SubTestName	String	• Optional element. • Maximum length of 60 characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Assessment Subtest Score	SubTestScore	String	• Optional element • Maximum length of 6 characters • If provided, then the SubTestName and TestDate are required. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Attendance			
Total Days Present	DaysAttended	String	• Optional element. • Implied decimal within ###. # format. • Must end in .0 or .5 (implied decimal).
Total Days Absent	DaysAbsent	String	• Optional element. • Implied decimal within ###. # format. • Must end in .0 or .5 (implied decimal).
Immunization			
Immunization Name	ImmunizationCode	String	• Optional element. • Maximum length of thirty-five characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Immunization Date	ImmunizationDate	Date	• Optional element. • The date type implements an ISO data type in the form of YYYY-MM-DD. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01-01 and less than 2040-01-01.
Immunization Dose	ImmunizationDose	Integer	• Optional element • Maximum length of two digits.
DisciplineAction			

Element Name	XML Name	Data Type	Restriction
Disciplinary Action End Date	DisciplineActionDate	Date	• Optional element. • The date type implements an ISO data type in the form of YYYY-MM-DD. • The only acceptable value is a valid date with a minimum value greater than current date (date record is created).
Disciplinary Action Number	DisciplineActionNum	String	• Optional element. • Maximum length of three characters.
Disciplinary Action Code	DisciplineActionCode	String	• Optional element. • Maximum length of two characters. • If provided, the only acceptable values are listed in Code Table TC06.
Disciplinary Action Reason	DisciplineActionReason	String	• Optional element. • Maximum length of two characters. • If provided, the only acceptable values are listed in Code Table TC07.
AcademicStatus			
Graduation Date	GraduationDate	Date	• Optional element. • The date type implements an ISO data type in the form of YYYY-MM. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01 and less than 2052-01.
Speech Requirement Met Date	SpeechMetDate	Date	• YYYY-MM • Optional element.
Graduation Program Type	GraduationDiplomaType	String	• Optional element if GradeLevel 10 or lower. • Maximum length of two characters. • If provided, the only acceptable values are listed in Code Table TC13.
Certification of Coursework Completion Date	CertificateDate	Date	• Optional element. • The date type implements an ISO data type in the form of YYYY-MM-DD. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01-01 and less than 2040-01-01.
Texas Grant Indicator	TexasGrant	String	• Optional element. • Maximum length of a single character. • The only acceptable values are listed in Code Table TC21
Distinguished Achievement	DistinguishedAchievement	String	• Optional element. • Maximum occurrence is one.

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Element Name	XML Name	Data Type	Restriction
Advanced Measure	AdvancedMeasure	String	• Optional element. • Maximum occurrence is four. • The only acceptable values are listed in Code Table TC29
FHSP Participant Code	FHSPParticipantCode	String	• The only acceptable values are listed in Code Table TC35 • Maximum length of one character. • Optional element.
FHSP Disting Level Achieve Indicator Code	FHSPDistingIndicatorCode	String	• The only acceptable values are listed in Code Table TC35 • Maximum length of one character. • Optional element.
Arts and Humanities Endorsement Indicator Code	ArtsEndorsementCode	String	• The only acceptable values are listed in Code Table TC35 • Maximum length of one character. • Optional element.
Business and Industry Endorsement Indicator Code	BusinessEndorsementCode	String	• The only acceptable values are listed in Code Table TC35 • Maximum length of one character. • Optional element.
Multi-Disciplinary Studies Endorsement Indicator Code	MultiStudiesEndorsementCode	String	• The only acceptable values are listed in Code Table TC35 • Maximum length of one character. • Optional element.
Public Services Endorsement Indicator Code	PublicServicesEndorsementCode	String	• The only acceptable values are listed in Code Table TC35 • Maximum length of one character. • Optional element.
STEM Endorsement Indicator Code	STEMEndorsementCode	String	• The only acceptable values are listed in Code Table TC35 • Maximum length of one character. • Optional element.
Performance Acknowledgment Dual Credit	DualCreditType	String	• The only acceptable values are listed in Code Table TC39 • Maximum length of one character. • Optional element.
Performance Acknowledgment Bilingualism/ Biliteracy	BilingBilitType	String	• The only acceptable values are listed in Code Table TC37 • Maximum length of one character. • Optional element.
Performance Acknowledgment College Readiness Assessments	CollegeAssessType	String	• The only acceptable values are listed in Code Table TC38 • Maximum length of one character. • Optional element.

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Element Name	XML Name	Data Type	Restriction
Performance Acknowledgment AP IB Exams	ApIbType	String	• The only acceptable values are listed in Code Table TC36 • Maximum length of three characters. • Optional element.
Performance Acknowledgment Certification Licensures	CertLicType	String	• Text field. • Maximum length 61 characters. • Optional element.
Individual-Graduation-Committee-Review-Code	IGCGradReview	String	• Optional element. • The only acceptable values are listed in Code Table TC40
FHSP College Career Instruction Indicator Code	FHSPCollegeCareerInstructionIndicator	String	• The only acceptable values are listed in Code Table TC16 • Maximum length of one character. • Optional element.
Associate Degree Indicator Code	AssociateDegree	String	• The only acceptable values are listed in Code Table TC16 • Maximum length of one character. • Optional element.
On-Ramps Dual Enrollment Indicator Code	OnRamps	String	• The only acceptable values are listed in Code Table TC16 • Maximum length of one character. • Optional element.
CPR-Instruction-Met-Date	CPRMetDate	Date	• YYYY-MM • Optional element.
Peace-Officer-Interaction-Instruction-Met-Date	POIIMetDate	Date	• YYYY-MM • Optional element.
Section-504-Indicator-Code	Section504	String	• The only acceptable values are listed in Code Table TC16 • Maximum length of one character. • Optional element.
Star-Of-Texas-Indicator-Code	StarofTexas	String	• The only acceptable values are listed in Code Table TC16 • Maximum length of one character. • Optional element.
CurrentCoursework			

Element Name	XML Name	Data Type	Restriction
Course Name	CourseTitle	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of one hundred characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWX YZabcdefghijklmnopqrstuvwxyz01234 56789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Number	CourseID	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of eight characters for public schools. Maximum length of 64 characters for private schools. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZa bcdefghijklmnopqrstuvwxyz01234567 89 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Abbreviation	Abbreviation	String	• Optional element • May be repeated. • Maximum length of one hundred characters. • White space is preserved. • Any of the following characters, including the space character, are valid: • ABCDEFGHIJKLMNOPQRSTUVWX YZabcdefghijklmnopqrstuvwxyz01234 56789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Semester	Semester	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of one digit.

Element Name	XML Name	Data Type	Restriction
Class Period	ClassPeriod	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of five characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Category	SubjectArea	String	• Optional element. • May be repeated for each course or academic year. • Maximum length of four characters. • The only acceptable values are listed in Code Table TC05
Course Grade	CourseGrade	String	• Optional element. • May be repeated for each course. • Maximum length of ten characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Withdrawal Course Grade	WithdrawGrade	String	• Optional element. • May be repeated for each course. • Maximum length of fifteen characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Grade Average	GradeAverage	String	• Optional element. • May be repeated for each course. • Maximum length of ten characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?

Element Name	XML Name	Data Type	Restriction
Course Credit	CourseCredit	String	• Optional element. • May be repeated for each course. • Implied decimal within #. # format.
Pass/Fail Credit Indicator	PassFailCredit	String	• Optional element. • May be repeated for each course, • Maximum length of two characters. • If present, the only acceptable values are listed in Code Table TC25.
Special Explanation Code	Explanation	String	• Optional element. • Maximum length of 2 characters. • May be repeated for each course. • If present, the only acceptable values are listed in Code Table TC19.
Course Teacher	CourseTeacher	String	• Optional element. • May be repeated for each CourseTitle. • Maximum length of forty characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Campus Awarding Credit	CreditCampus	String	• Optional element. • Minimum length of nine characters. • Must be valid TEA-approved campus identification number. • Declared as a string data type to allow for zeros in the first position. • The only acceptable value is nine characters in a sequence with each character in a range from 0 to 9.
Semester Sequence	SemesterSeq	String	• Optional element. • Maximum length of a single character. • May be repeated for each course or AcademicSessionType. • If present, the only acceptable values are 0 through A.

Element Name	XML Name	Data Type	Restriction
Final Grade Average	FinalGradeAverage	String	• Optional element. • May be repeated for each course. • Maximum length of ten characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Academic Year	SchoolYear	String	• Required element if student has not graduated. • Maximum length of nine characters. • Punctuation allowed includes dash. • Can be repeated as needed.
Grade Level	GradeLevel	String	• Required element. • Maximum length of two characters. • The only acceptable value is EE, PK, KG, and 01 through 12.
AcademicSession			
Academic Year	SchoolYear	String	• Required element if student has not graduated. • Maximum length of nine characters. • Punctuation allowed includes dash. • Can be repeated as needed.
Grade Level	GradeLevel	String	• Required element. • Maximum length of two characters. • The only acceptable value is EE, PK, KG, and 01 through 12.
Course Name	CourseTitle	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of one hundred characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?

Element Name	XML Name	Data Type	Restriction
Course Number	CourseID	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of eight characters for public schools. Maximum length of 64 characters for private schools. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Abbreviation	Abbreviation	String	• Optional element • May be repeated. • Maximum length of one hundred characters. • White space is preserved. • Any of the following characters, including the space character, are valid: • ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Semester	Semester	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of one digit.
Class Period	ClassPeriod	String	• Optional element. • May be repeated for each course or academic period. • Maximum length of five characters. • White space is preserved. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Category	SubjectArea	String	• Optional element. • May be repeated for each course or academic year. • Maximum length of four characters. • The only acceptable values are listed in Code Table TC05

Element Name	XML Name	Data Type	Restriction
Course Grade	CourseGrade	String	• Optional element. • May be repeated for each course. • Maximum length of ten characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZa bcdefghijklmnopqrstuvwxyz01234567 89 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Withdrawal Course Grade	WithdrawGrade	String	• Optional element. • May be repeated for each course. • Maximum length of fifteen characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZa bcdefghijklmnopqrstuvwxyz01234567 89 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Grade Average	GradeAverage	String	• Optional element. • May be repeated for each course. • Maximum length of ten characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZa bcdefghijklmnopqrstuvwxyz01234567 89 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Course Credit	CourseCredit	String	• Optional element. • May be repeated for each course. • Implied decimal within #. # format.
Pass/Fail Credit Indicator	PassFailCredit	String	• Optional element. • May be repeated for each course, • Maximum length of two characters. • If present, the only acceptable values are listed in Code Table TC25.
Special Explanation Code	Explanation	String	• Optional element. • Maximum length of 2 characters. • May be repeated for each course. • If present, the only acceptable values are listed in Code Table TC19.

Element Name	XML Name	Data Type	Restriction
Course Teacher	CourseTeacher	String	• Optional element. • May be repeated for each CourseTitle. • Maximum length of forty characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
Campus Awarding Credit	CreditCampus	String	• Optional element. • Minimum length of nine characters. • Must be valid TEA-approved campus identification number. • Declared as a string data type to allow for zeros in the first position. • The only acceptable value is nine characters in a sequence with each character in a range from 0 to 9.
Semester Sequence	SemesterSeq	String	• Optional element. • Maximum length of a single character. • May be repeated for each course or AcademicSessionType. • If present, the only acceptable values are 0 through A.
Final Grade Average	FinalGradeAverage	String	• Optional element. • May be repeated for each course. • Maximum length of ten characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?
AcademicSummary			
Grade Point Average	GPA	String	• Optional element. • Maximum length of ten characters. • Any of the following characters, including the space character, are valid: ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789 ~! @ # $ % ^ & * ( ) - _ + = : ; " ' , . / < > ?

Element Name	XML Name	Data Type	Restriction
Number in Class	ClassTotalNumber	String	• Optional element. • Maximum length of five digits. • If provided, the only acceptable value is a range from 1 through 99999.
Class Rank	ClassRank	String	• Optional element. • Maximum length of five digits. • If provided, the only acceptable value is a range from 0 through 99999.
Date of Ranking	ClassRankingDate	Date	• Optional element. • The date type implements an ISO data type in the form of YYYY-MM-DD. • The only acceptable value is a valid date with a minimum value greater than or equal to 1957-01-01 and less than 2040-01-01.
Quartile	Quartile	String	• Optional element. • Maximum length of a single character. • If present, the only acceptable value is a single character in a rank from 1 through 4.
College Board Campus Code	CollegeCampusCode	String	• Optional element. • Maximum length of six characters. • Declared as a string data type to allow for zeros in the first position. • The only acceptable value is six characters in a sequence with each character in a range from 0 to 9.

Example of TREx Instance

Following is an example of the XSD for an extract file for a student record. Please reference Appendix B of this manual for an example of the full TREx XML schema.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<trex:TRExStudentRecords xmlns:trex="urn:us:tx:state:tea:TREx:v1.20"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
<TRExStudentRecord>
<StudentIdentification>
        <StudentUniqueID>1234567890</StudentUniqueID>
<Name>
        <FirstName>Joe</FirstName>
        <MiddleName>Q</MiddleName>
        <LastName>Jones</LastName>
        <Suffix>1</Suffix>
</Name>
        <StudentID>33322444</StudentID>
        <PriorID>a</PriorID>
        <LocalID>a</LocalID>

<Address>
        <Address>101 Congress Ave.</Address>
        <City>Austin</City>
        <StateProvince>TX</StateProvince>
        <Country>US</Country>
        <PostalCode>78701</PostalCode>
</Address>

</StudentIdentification>
<Parent>
<Name>
        <FirstName>Cassandra</FirstName>
        <MiddleName>a</MiddleName>
        <LastName>Jones</LastName>
        <Suffix>4</Suffix>
</Name>
</Parent>

<StudentDemographic>
        <Gender>F</Gender>
        <Race>5</Race>

<Ethnicity>
        <AmericanIndianAlaskaNativeCode>1</AmericanIndianAlaskaNativeCode>
        <AsianCode>1</AsianCode>
        <BlackAfricanAmericanCode>0</BlackAfricanAmericanCode>
        <HispanicLatinoCode>0</HispanicLatinoCode>
        <NativeHawaiianPacificIslanderCode>0</NativeHawaiianPacificIslanderCode>
        <WhiteCode>1</WhiteCode>
</Ethnicity>

        <BirthDate>0000-0-0</BirthDate>
        <HomeLanguage>5N</HomeLanguage>
        <StudentLanguage>2N</StudentLanguage>
```

```xml
        <HomeLanguageSurveyDateAdministered>0000-0-
0</HomeLanguageSurveyDateAdministered>
        <Migrant>1</Migrant>
        <Homeless>0</Homeless>
        <Dyslexia>0</Dyslexia>
        <MilitaryConnected>1</MilitaryConnected>
        <FosterCare>1</FosterCare>
        <AsyleeRefugeeCode>1</AsyleeRefugeeCode>
</StudentDemographic>

<School>
        <SchoolID>000000000</SchoolID>
        <SchoolName>a</SchoolName>
        <DistrictID>000000</DistrictID>
        <DistrictName>a</DistrictName>

<Address>
        <Address>a</Address>
        <City>a</City>
        <StateProvince>PE</StateProvince>
        <Country>TO</Country>
        <PostalCode>00000</PostalCode>
</Address>
        <PhoneNumber>a</PhoneNumber>
        <Fax>a</Fax>
</School>

<Enrollment>
        <GradeLevel>12</GradeLevel>
        <EntryDate>0000-0-0</EntryDate>
        <ExitDate>0000-0-0</ExitDate>
        <WithdrawDate>0000-0-0</WithdrawDate>
        <WithdrawReason>82</WithdrawReason>
        <GradePlaced>EE</GradePlaced>
        <GradePromoted>08</GradePromoted>
        <GradeRetained>03</GradeRetained>
</Enrollment>

<SpecialPrograms>
        <LEP>F</LEP>
        <AlternativeLanguage>02</AlternativeLanguage>
<DualLanguageImmersion>
        <ImmersionYear>01</ImmersionYear>
        <ImmersionLanguage>06</ImmersionLanguage>
        <AssessmentMetDate>0000-0</AssessmentMetDate>
        <CompletionSchoolYear>0000-0000</CompletionSchoolYear>
</DualLanguageImmersion>
        <EconomicDisadvantaged>99</EconomicDisadvantaged>
        <AtRisk>0</AtRisk>
        <TitleI>7</TitleI>
        <SpecialEd>0</SpecialEd>
        <IEP>0</IEP>
        <Bilingual>1</Bilingual>
```

```xml
        <ESL>1</ESL>
        <GiftedTalented>2</GiftedTalented>
        <CTE>2</CTE>
        <PersonalGradPlan>1</PersonalGradPlan>
</SpecialPrograms>

<Assessment>
        <TestName>B2</TestName>
        <TestLevel>10</TestLevel>
        <TestDate>0000-0</TestDate>
        <ExitRequirementMetDate>0000-0</ExitRequirementMetDate>
        <TestScore>a</TestScore>
        <TestCode>L</TestCode>
        <PerformanceLevel>4</PerformanceLevel>
        <AssessmentSubTest>
                <SubTestName>a</SubTestName>
                <SubTestScore>a</SubTestScore>
        </AssessmentSubTest>
</Assessment>

<Attendance>
        <DaysAttended>0</DaysAttended>
        <DaysAbsent>0</DaysAbsent>
</Attendance>

<Immunization>
        <ImmunizationCode>a</ImmunizationCode>
        <ImmunizationDate>0000-0-0</ImmunizationDate>
        <ImmunizationDose>0</ImmunizationDose>
</Immunization>

<DisciplineAction>
        <DisciplineActionDate>0000-0-0</DisciplineActionDate>
        <DisciplineActionNum>0</DisciplineActionNum>
        <DisciplineActionCode>25</DisciplineActionCode>
        <DisciplineActionReason>56</DisciplineActionReason>
</DisciplineAction>

<AcademicStatus>
        <GraduationDate>0000-0</GraduationDate>
        <SpeechMetDate>0000-0</SpeechMetDate>
        <GraduationDiplomaType>24</GraduationDiplomaType>
        <CertificateDate>0000-0-0</CertificateDate>
        <TexasGrant>2</TexasGrant>
        <DistinguishedAchievements>
                <AdvancedMeasure>A</AdvancedMeasure>
        </DistinguishedAchievements>
        <FHSPParticipationCode>0</FHSPParticipationCode>
        <FHSPDistingIndicatorCode>1</FHSPDistingIndicatorCode>
        <STEMEndorsementCode>1</STEMEndorsementCode>
        <BusinessEndorsementCode>0</BusinessEndorsementCode>
        <PublicServicesEndorsementCode>1</PublicServicesEndorsementCode>
        <ArtsEndorsementCode>1</ArtsEndorsementCode>
```

```xml
<MultiStudiesEndorsementCode>1</MultiStudiesEndorsementCode>
<DualCreditType>
        <DualCreditCode>2</DualCreditCode>
                <MetDate>2013-05</MetDate>
        </DualCreditType>

        <BilingBilitType>
                <BilingBilitCode>1</BilingBilitCode>
                <MetDate>2013-01</MetDate>
        </BilingBilitType>

        <CollegeAssessType>
                <CollegeAssessCode>6</CollegeAssessCode>
                <MetDate>2012-02</MetDate>
        </CollegeAssessType>

        <ApIbType>
                <ApIbCode>57</ApIbCode>
                <MetDate>2013-05</MetDate>
        </ApIbType>


        <CertLicType>
                <CertLicCode>Microsoft Developer Network</CertLicCode>
                <MetDate>2012-08</MetDate>
        </CertLicType>

        <IGCGradReview>00</IGCGradReview>

<FHSPCollegeCareerInstructionIndicator>1</FHSPCollegeCareerInstructionIndicator>
                <AssociateDegree>1</AssociateDegree>
                <OnRamps>1</OnRamps>
                <Section504>0</Section504>
                <POIIMetDate>2012-09</POIIMetDate>
                <CPRMetDate>2012-09</CPRMetDate>
                <StarOfTexas>1</StarOfTexas>
</AcademicStatus>

<CurrentCoursework>
        <Course>
                <CourseTitle>Algebra I 2092</CourseTitle>
                <CourseID>03100500</CourseID>
                <Abbreviation>1</Abbreviation>
                <Semester>1</Semester>
                <ClassPeriod>2</ClassPeriod>
                <SubjectArea>EL</SubjectArea>
                <CourseGrade>90</CourseGrade>
                <WithdrawGrade>70</WithdrawGrade>
                <GradeAverage>85</GradeAverage>
                <CourseCredit>1.0</CourseCredit>
                <PassFailCredit>05</PassFailCredit>
                <Explanation>T</Explanation>
                <CourseTeacher>a</CourseTeacher>
```

```xml
            <CreditCampus>000000000</CreditCampus>
            <SemesterSeq>D8</SemesterSeq>
            <FinalGradeAverage>a</FinalGradeAverage>
      </Course>

<SchoolYear>2020-2021</SchoolYear>
<GradeLevel>11</GradeLevel>
<SessionType>Quarter</SessionType>
</CurrentCoursework>
      <AcademicSession>
            <SchoolYear>2020-2021</SchoolYear>
            <GradeLevel>02</GradeLevel>
            <SessionType>Trimester</SessionType>
      <Course>

            <CourseTitle>Biology 3091</CourseTitle>
            <CourseID>03010200</CourseID>
            <Abbreviation>a</Abbreviation>
            <Semester>2</Semester>
            <ClassPeriod>1</ClassPeriod>
            <SubjectArea>SP</SubjectArea>
            <CourseGrade>85</CourseGrade>
            <WithdrawGrade>85</WithdrawGrade>
            <GradeAverage>85</GradeAverage>
            <CourseCredit>1.0</CourseCredit>
            <PassFailCredit>13</PassFailCredit>
            <Explanation>Z</Explanation>
            <CourseTeacher>a</CourseTeacher>
            <CreditCampus>000000000</CreditCampus>
            <SemesterSeq>A</SemesterSeq>
            <FinalGradeAverage>83</FinalGradeAverage>
      </Course>

      <AcademicSummary>
            <GPA>3.0</GPA>
            <ClassTotalNumber>200</ClassTotalNumber>
            <ClassRank>15</ClassRank>
            <ClassRankingDate>2006-12-1</ClassRankingDate>
            <Quartile>4</Quartile>
            <CollegeCampusCode>000000</CollegeCampusCode>
      </AcademicSummary>
            </AcademicSession>
      <AcademicSummary>
            <GPA>3.0</GPA>
            <ClassTotalNumber>200</ClassTotalNumber>
            <ClassRank>15</ClassRank>
            <ClassRankingDate>2006-12-1</ClassRankingDate>
            <Quartile>4</Quartile>
            <CollegeCampusCode>000000</CollegeCampusCode>
      </AcademicSummary>
</TRExStudentRecord>
</trex:TRExStudentRecords>
```

TREx Complex Types

Following is a list of the complex types and groups included in the TREx XML schema. Please refer to Appendix B for a full copy of the TREx XML Schema.

Complex Type Name	Element Name Sequence
AcademicSessionType	SchoolYear
	GradeLevel
	SessionType
	Course
	AcademicSummary
AcademicStatusType	GraduationDate
	SpeechMetDate
	GraduationDiplomaType
	CertificateDate
	TexasGrant
	DistinguishedAchievements
	AdvancedMeasure
	FHSPParticipantCode
	FHSPDistingIndicatorCode
	STEMEndorsementCode
	BusinessEndorsementCode
	PublicServicesEndorsementCode
	ArtsEndorsementCode
	MultiStudiesEndorsementCode
	DualCreditType
	BilingBilitType
	CollegeAssesType
	ApIbType)
	CertLicType
	IGCGradReview
	FHSPCollegeCareerInstructionndicator
	AssociateDegree
	OnRamps
	Section504
	POIIMetDate
	CPRMetDate
	StarofTexas
AcademicSummaryType	GPA
	ClassTotalNumber
	ClassRank
	ClassRankingDate
	Quartile
	CollegeCampusCode
AddressType	Address
	City
	StateProvince
	Country
	PostalCode
AssessmentSubTestType	SubTestType
	SubTestScore
AssessmentType	TestName

Complex Type Name	Element Name Sequence
	AdditionalTestName
	TestLevel
	TestDate
	ExitRequirementMetDate
	TestScore
	TestCode
	PerformanceLevel
	AssessmentSubTest
AttendanceType	DaysAttended
	DaysAbsent
CourseType	CourseTitle
	CourseID
	Abbreviation
	Semester
	ClassPeriod
	SubjectArea
	CourseGrade
	WithdrawGrade
	GradeAverage
	CourseCredit
	PassFailCredit
	Explanation
	CourseTeacher
	CreditCampus
	SemesterSeq
	FinalGradeAverage
CurrentCourseworkType	Course~~Type~~
	SchoolYear
	GradeLevel
	SessionType
DisciplineActionType	DisciplineActionDate
	DisciplineActionNum
	DisciplineActionCode
	DisciplineActionReason
EnrollmentType	GradeLevel
	EntryDate
	ExitDate
	WithdrawDate
	WithdrawReason
	GradePlaced
	GradePromoted
	GradeRetained
EthnicityType	AmericanIndianAlaskaNativeCode
	AsianCode
	BlackAfricanAmericanCode
	HispanicLatinoCode
	NativeHawaiianPacificIslanderCode

Complex Type Name	Element Name Sequence
	WhiteCode
ImmunizationType	ImmunizationCode
	ImmunizationDate
	ImmunizationDose
ParentType	Name
PersonNameType	FirstName
	MiddleName
	LastName
	Suffix
PhoneNumberGroup	PhoneNumber
	Fax
SchoolType	SchoolID
	SchoolName
	DistrictID
	DistrictName
	Address
	PhoneNumber
SpecialProgramsType	LEP
	AlternativeLanguage
	DualLanguageImmersion
	EconomicDisadvantaged
	AtRisk
	TitleI
	SpecialEd
	IEP
	Bilingual
	ESL
	GiftedTalented
	CTE
	Personal Graduation Plan
StudentDemographicType	Gender
	Race
	Ethnicity
	BirthDate
	HomeLanguage
	StudentLanguage
	HomeLanguagesurveyDateAdministered
	Migrant
	Homeless
	Dyslexia
	MilitaryConnected
	Foster Care
	AsyleeRefugee
StudentIdentificationType	StudentUniqueID
	Name
	StudentID

4.35

Complex Type Name	Element Name Sequence
	PriorID
	LocalID
	Address
Student RecordType	StudentIdentificationType
	Parent
	StudentDemographic
	School
	Enrollment
	SpecialPrograms
	Assessment
	Attendance
	Immunization
	DisciplineAction
	AcademicStatus
	CurrentCoursework
	AcademicSession
	AcademicSummary
StudentRecordsType	TRExStudentRecord
PerfAckApIbType	ApIbCode
	MetDate
PerfAckCollegeAssessType	CollegeAssessCode
	MetDate
PerfAckBilingBilitType	BilingBilitCode
	MetDate
PerfAckCertLicType	CertLicCode
	MetDate
PerfAckDualCreditType	DualCreditCode
	MetDate
DistinguishedAchievementType	AdvancedMeasure
DualLanguageImmersionType	ImmersionYear
	ImmersionLanguage
	AssessmentMetDate
	CompletionSchoolYear

TREx Simple Types
Following is a list of the simple types found in the TREx XML schema:

Common Name	Simple Name
Academic Year	SchoolYear
Additional Test Name	AdditionalTestName
Address (Street or PO Box)	Address
Advanced Measure	AdvancedMeasure
American Indian- Alaska Native	AmericanIndianAlaskaNativeCode
Arts and Humanities Endorsement Indicator Code	ArtsEndorsementCode
Asian	AsianCode
Assessment Date	TestDate
Alternative Language Program	AlternativeLanguage
Assessment Date Exit Requirement Met	ExitRequirementMetDate
Assessment Grade Level	TestLevel
Assessment Name	TestName
Assessment Score	TestScore
Assessment Score Code	TestCode
Assessment Subtest	SubTestName
Assessment Subtest Score	SubTestScore
Associate Degree Indicator Code	AssociateDegree
At Risk Indicator	AtRisk
Bilingual Program Type Code	Bilingual
Bilingual Indicator	Bilingual
Black- African American	BlackAfricanAmericanCode
Business and Industry Endorsement Indicator Code	BusinessEndorsementCode
Campus Awarding Credit	CreditCampus
Campus Fax	Fax
Campus ID	SchoolID
Campus Name	SchoolName
Campus Phone	PhoneNumber
Career Tech Ed Indicator	CTE
Certification of Coursework Completion Date	CertificateDate
City	City
Class Period	ClassPeriod
Class Rank	ClassRank
College Board Campus Code	CollegeCampusCode
Course Category	SubjectArea
Country	Country
Course Abbreviation	Abbreviation
Course Category	SubjectArea
Course Credit	CourseCredit
Course Grade	CourseGrade
Course Grade Average	GradeAverage
Course Name	CourseTitle
Course Number	CourseID
Course Semester	Semester
Course Teacher	CourseTeacher
CPR-Instruction-Met-Date	CPRInstructionMetDate
Date of Birth	BirthDate

Date of Ranking	ClassRankingDate
Discipline Action Code	DisciplineActionCode
Disciplinary Action End Date	DisciplineActionDate
Disciplinary Action Number	DisciplineActionNum
Discipline Action Reason	DisciplineActionReason
District ID	DistrictID
District Name	DistrictName
Dual Language Immersion Assessment Met Date	AssessmentMetDate
Dual Language Immersion Completion School Year	CompletionSchoolYear
Dual Language Immersion Language Code	ImmersionLanguage
Dual Language Immersion Year	ImmersionYear
Dyslexia Indicator Code	Dyslexia
Economic Disadvantaged Indicator Code	EconomicDisadvantage
ESL Indicator	ESL
Ethnicity Code (USDE 1977 definitions)	Race
FHSP College Career instruction Indicator Code	FSHPCollegeCareerInstructionIndicator
FHSP Participant Code	FHSPParticipantCode
FHSP Disting Level Achieve Indicator Code	FHSPDistingIndicatorCode
FHSP	ArtsEndorsementCode
FHSP	BusinessEndorsementCode
FHSP	MultiStudiesEndorsementCode
FHSP	PublicServicesEndorsementCode
FHSP	STEMEndorsementCode
Final Grade Average	FinalGradeAverage
First Name	FirstName
Foster Care Indicator Code	FosterCare
Gender	Gender
Generation Code	Suffix
Gifted Talented Indicator	GiftedTalented
Grade Level	GradeLevel
Grade of Retention (PK-8)	GradeRetained
Grade Point Average	GPA
Graduation Date	GraduationDate
Graduation Program Type	GraduationDiplomaType
Hispanic-Latino	HispanicLatinoCode
Home Language Code	HomeLanguage
Home Language Survey Date Administered	HomeLanguageSurveyDateAdministered
Homeless Indicator	Homeless
IEP (Individualized Education Program) Indicator	IEP
Immunization Date	ImmunizationDate
Immunization Dose	ImmunizationDose
Immunization Name	ImmunizationCode
Individual Graduation Committee Review Code	IGCGradReview
Home Language	Language
Last Date of Attendance	ExitDate
Last Name	LastName
Last Withdrawal Date	WithdrawDate
LEP (Limited English Proficiency) Indicator	LEP
Local Student ID	LocalID

Middle Name	MiddleName
Migrant Indicator	Migrant
45TMilitary Connected	45TMilitaryConnected
Multi Disciplinary Studies Endorsement Indicator Code	MultiStudiesEndorsementCode
Native Hawaiian-Pacific Islander	NativeHawaiianPacificIslanderCode
Number in Class	ClassTotalNumber
On-Ramps Dual Enrollment Indicator Code	OnRamps
Original Entry Date	EntryDate
Pass/Fail Credit Indicator	PassFailCredit
Peace-Officer-Interaction-Instruction-Met-Date	POIIMetDate
Performance Acknowledgment AP IB	ApIbType
Performance Acknowledgment Bilingualism/Biliteracy	BilingBilitType
Performance Acknowledgment Certification Licensures	CertLicType
Performance Acknowledgment College Readiness Assessment	CollegeAssessType
Performance Acknowledgment Dual Credit	DualCreditType
Performance Acknowledgment Met Date	MetDate
Personal Graduation Plan	PersonalGradPlan
Placed in Grade	GradePlaced
Prior ID	PriorID
Promoted to Grade	GradePromoted
Public Services Endorsement Indicator Code	PublicServicesEndorsementCode
Quartile	Quartile
Participation Indicator Code	SpecialEd
Participation Indicator Code	AtRisk
Participation Indicator Code	Migrant
Participation Indicator Code	IEP
Participation Indicator Code	PersonalGradPlan
Participation Indicator Code	Dyslexia
Participation Indicator Code	FHSPCollegeCareerInstructionIndicator
Participation Indicator Code	AssociateDegree
Participation Indicator Code	OnRamps
Participation Indicator Code	Section504
Participation Indicator Code	StarofTexas
Race/Ethnicity (USDE 1997 definitions)	Ethnicity
Section-504-Indicator-Code	Section504
Semester Sequence Code	SemesterSeq
Session Type	SessionType
Special Education Indicator	SpecialEd
Special Explanation Code	Explanation
Speech Requirement Met Date	SpeechMetDate
STAAR Performance Level	PerformanceLevel
Star-Of-Texas-Indicator-Code	StarofTexas
State	StateProvince
STEM Endorsement Indicator Code	STEMEndorsementCode
Student ID	StudentID
Student Language Code	StudentLanguage
Texas Grant Indicator Code	TexasGrant
Title I Part A Indicator	TitleI

Total Days Absent	DaysAbsent
Total Days Present	DaysAttended
Tx Student Unique ID	StudentUniqueID
Unschooled Asylee/Refugee	AsyleeRefugeeCode
White	WhiteCode
Withdrawal Course Grade	WithdrawGrade
Withdrawal Reason Code	WithdrawReason
Zip Code	PostalCode

TREx Enumerated Values

Following is a list of the data elements with enumerated values. These are described further in Sections 2 of this manual, as well as included in the schema in Appendix B.

Code Table Common Name	Element XML Short Name	Location
Academic Year	SchoolYear	Student Record, AAR-Transcript
Additional Test Name	AdditionalTestName	Student Record
Address (Street or PO Box)	Address	Student Record AAR-Transcript
Advanced Measure	AdvancedMeasure	Student Record; AAR - Transcript
Alternative Language Program Code	AlternativeLanguage	Student Record
American Indian- Alaska Native	AmericanIndianAlaskaNativeCode	Student Record AAR-Transcript
Arts and Humanities Endorsement Indicator Code	ArtsEndorsementCode	Student Record AAR-Transcript
Asian	AsianCode	Student Record AAR-Transcript
Assessment Date	TestDate	Student Record AAR-Transcript
Assessment Date Exit Requirement Met	ExitRequirementMetDate	Student Record AAR-Transcript
Assessment Grade Level	TestLevel	Student Record AAR-Transcript
Assessment Name	TestName	Student Record
Assessment Score	TestScore	Student Record
Assessment Score Code	TestCode	Student Record
Assessment Subtest	SubTestName	Student Record
Assessment Subtest Score	SubTestScore	Student Record
Associate Degree Indicator Code	AssociateDegree	Student Record
At Risk Indicator	AtRisk	Student Record
Bilingual Indicator	Bilingual	Student Record
Black- African American	BlackAfricanAmericanCode	Student Record AAR-Transcript
Business and Industry Endorsement Indicator Code	BusinessEndorsementCode	Student Record AAR-Transcript
Campus Awarding Credit	CreditCampus	Student Record AAR-Transcript
Campus Fax	Fax	Student Record
Campus ID	SchoolID	Student Record AAR-Transcript
Campus Name	SchoolName	Student Record AAR-Transcript
Campus Phone	PhoneNumber	Student Record AAR-Transcript
Career Tech Ed Indicator	CTE	Student Record
Certificate Completion Date	CertificateDate	AAR-Transcript
City	City	Student Record AAR-Transcript
Class Period	ClassPeriod	Student Record
Class Rank	ClassRank	AAR-Transcript

Code Table Common Name	Element XML Short Name	Location
College Board Campus Code	CollegeCampusCode	AAR-Transcript
Country	Country	AAR-Transcript
Course Abbreviation	Abbreviation	Student Record AAR-Transcript
Course Category	SubjectArea	Student Record AAR-Transcript
Course Credit	CourseCredit	Student Record AAR-Transcript
Course Grade	CourseGrade	Student Record AAR-Transcript
Course Grade Average	GradeAverage	Student Record AAR-Transcript
Course Name	CourseTitle	Student Record AAR-Transcript
Course Number	CourseID	Student Record AAR-Transcript
Course Semester	Semester	Student Record AAR-Transcript
Course Teacher	CourseTeacher	Student Record
CPR-Instruction-Met-Date	CPRInstructionMetDate	Student Record AAR - Transcript
Date of Birth	BirthDate	Student Record AAR-Transcript
Date of Ranking	ClassRankingDate	AAR-Transcript
Discipline Action Code	DisciplineActionCode	Student Record
Disciplinary Action End Date	DisciplineActionDate	Student Record
Disciplinary Action Number	DisciplineActionNum	Student Record
Discipline Action Reason	DisciplineActionReason	Student Record
District ID	DistrictID	Student Record AAR-Transcript
District Name	DistrictName	Student Record AAR-Transcript
Dual Language Immersion Assessment Met Date	AssessmentMetDate	Student Record
Dual Language Immersion Completion School Year	CompletionSchoolYear	Student Record
Dual Language Immersion Language Code	ImmersionLanguage	Student Record
Dual Language Immersion Year	ImmersionYear	Student Record
Dyslexia Indicator Code	Dyslexia	Student Record
Economic Disadvantaged Indicator Code	EconomicDisadvantage	Student Record
ESL Indicator	ESL	Student Record
Ethnicity Code (USDE 1977 definitions)	Race	Student Record AAR - Transcript
FHSP College Career instruction Indicator Code	FSHPCollegeCareerInstructionIndicator	Student Record
FHSP Participant Code	FHSPParticipantCode	Student Record AAR Transcript
FHSP Disting Level Achieve Indicator Code	FHSPDistingIndicatorCode	Student Record AAR Transcript
Final Grade Average	FinalGradeAverage	Student Record AAR Transcript

Code Table Common Name	Element XML Short Name	Location
First Name	FirstName	Student Record AAR Transcript
Foster Care Indicator Code	FosterCare	Student Record
Gender	Gender	Student Record AAR Transcript
Generation Code	Suffix	Student Record AAR Transcript
Gifted Talented Indicator	GiftedTalented	Student Record
Grade Level	GradeLevel	Student Record
Grade of Retention (PK-8)	GradeRetained	Student Record
Grade Point Average	GPA	AAR-Transcript
Graduation Date	GraduationDate	AAR-Transcript
Graduation Program Type	GraduationDiplomaType	AAR - Transcript
Hispanic-Latino	HispanicLatinoCode	Student Record AAR Transcript
Home Language Code	HomeLanguage	Student Record
Home Language Survey Date Administered	HomeLanguageSurveyDateAdministered	Student Record
Homeless Indicator	Homeless	Student Record
IBC Reimbursement Indicator	IBCReimbursement	Student Record
IEP (Individualized Education Program) Indicator	IEP	Student Record
Immunization Date	ImmunizationDate	Student Record
Immunization Dose	ImmunizationDose	Student Record
Immunization Name	ImmunizationCode	Student Record
Individual Graduation Committee Review Code	IGCGradReview	Student Record
Last Date of Attendance	ExitDate	Student Record
Last Name	LastName	Student Record AAR-Transcript
Last Withdrawal Date	WithdrawDate	Student Record
LEP (Limited English Proficiency) Indicator	LEP	Student Record
Local Student ID	LocalID	Student Record AAR-Transcript
Middle Name	MiddleName	Student Record AAR-Transcript
Migrant Indicator	Migrant	Student Record
Military Connected	MilitaryConnected	Student Record
Multi-Disciplinary Studies Endorsement Indicator Code	MultiStudiesEndorsementCode	Student Record AAR Transcript
Native Hawaiian-Pacific Islander	NativeHawaiianPacificIslanderCode	Student Record AAR Transcript
Number in Class	ClassTotalNumber	AAR-Transcript
On-Ramps Dual Enrollment Indicator Code	OnRamps	Student Record
Original Entry Date	EntryDate	Student Record
Pass/Fail Credit Indicator	PassFailCredit	Student Record AAR-Transcript
Peace-Officer-Interaction-Instruction-Met-Date	POIIMetDate	Student Record AAR-Transcript

Code Table Common Name	Element XML Short Name	Location
Performance Acknowledgment AP IB	ApIbType	Student Record AAR-Transcript
Performance Acknowledgment Bilingualism/Biliteracy	BilingBilitType	Student Record AAR-Transcript
Performance Acknowledgment Certification Licensures	CertLicType	Student Record AAR-Transcript
Performance Acknowledgment College Readiness Assessment	CollegeAssessType	Student Record AAR-Transcript
Performance Acknowledgment Dual Credit	DualCreditType	Student Record AAR-Transcript
Performance Acknowledgment Met Date	MetDate	Student Record AAR-Transcript
Personal Graduation Plan	PersonalGradPlan	Student Record
PK Eligible Previous Year Indicator Code	PKeligiblePreiousYear	Student Record
Placed in Grade	GradePlaced	Student Record
Post-Secondary Certification Licensure Earned	IBCEarned	Student Record
Prior ID	PriorID	Student Record
Promoted to Grade	GradePromoted	Student Record
Public Services Endorsement Indicator Code	PublicServicesEndorsementCode	Student Record AAR Transcript
Quartile	Quartile	AAR - Transcript
SAT-ACT-Reimbursement Indicator	SATACTReimbursement	Student Record
Section-504-Indicator-Code	Section504	Student Record
Semester Sequence Code	SemesterSeq	Student Record
Session Type	SessionType	Student Record AAR-Transcript
Special Education Indicator	SpecialEd	Student Record
Special Explanation Code	Explanation	AAR-Transcript
Speech Requirement Met Date	SpeechMetDate	Student Record AAR-Transcript
STAAR Performance Level	PerformanceLevel	Student Record AAR Transcript
Star-Of-Texas-Indicator-Code	StarofTexas	Student Record
State	StateProvince	Student Record AAR Transcript
STEM Endorsement Indicator Code	STEMEndorsementCode	Student Record AAR Transcript
Student ID	StudentID	Student Record AAR Transcript
Student Language Code	StudentLanguage	Student Record
Texas Grant Indicator Code	TexasGrant	AAR - Transcript
Title I Part A Indicator	TitleI	Student Record
Total Days Absent	DaysAbsent	Student Record
Total Days Present	DaysAttended	Student Record
Tx Student Unique ID	StudentUniqueID	Student Record
Unschooled Asylee/Refugee	AsyleeRefugeeCode	Student Record
White	WhiteCode	Student Record AAR Transcript
Withdrawal Course Grade	WithdrawGrade	Student Record
Withdrawal Reason Code	WithdrawReason	Student Record

Code Table Common Name	Element XML Short Name	Location
Zip Code	PostalCode	Student Record AAR-Transcript

Hierarchy of XML Elements

TRExStudentRecords
    TRExStudentRecord (1 … n)
        StudentIdentificationType (1)
            StudentUniqueID (1)
            Name (1)
                FirstName (1)
                MiddleName (0 or 1)
                LastName (1)
                Suffix (0 or 1)

            PriorID (0 or 1)
            LocalID (0 or 1)
            Address (0 or 1)
                Address (0 or 1)
                City (0 or 1)
                StateProvince (0 or 1)
                Country (0 or 1)
                PostalCode (0 or 1)
        Parent (0 … 9)
            Name (1)
                FirstName (1)
                MiddleName (0 or 1)
                LastName (1)
                Suffix (0 or 1)
        StudentDemographic (1)
            Gender (1)
            Race (0 or 1)
            Ethnicity (0 or 1)
            BirthDate (1)
            HomeLanguage (0 or 1)
            StudentLanguage (0 or 1)
            HomeLanguageSurveyAdministered (0 or 1)
            Migrant (0 or1)
            Homeless (0 or 1)
            Dyslexia (0 or 1)
            MiltaryConnected (0 or1)
            FosterCare(0 or 1)
            AsyleeRefugeeCode (0 or 1)

        School (1)
            SchoolID (1)
            SchoolName (1)
            DistrictID (1)
            DistrictName (0 or 1)
            Address (0 or 1)
                Address (0 or 1)
                City (0 or 1)
                StateProvince (0 or 1)
                Country (0 or 1)
                PostalCode (0 or 1)
            PhoneNumber (1)
            Fax (0 or 1)
        Enrollment (1)
            GradeLevel (1)
            EntryDate (0 or 1)

        ExitDate (0 or 1)
        WithdrawDate (0 or 1)
        WithdrawReason (0 or 1)
        GradePlaced (0 or 1)
        GradePromoted (0 or 1)
        GradeRetained (0 or 1)
SpecialPrograms (0 or 1)
        LEP (0 or 1)
        AlternativeLanguage (0 or 1)
        DualLanguageImmersion (1)
            ImmersionYear (1)
            ImmersionLanguage (0 or 1)
            AssessmentMetDate (0 or 1)
            CompletionSchoolYear (0 or 1)
        EconomicDisadvantaged (0 or 1)
        AtRisk (0 or 1)
        TitleI (0 or 1)
        SpecialEd (0 or 1)
        IEP (0 or 1)
        Bilingual (0 or 1)
        ESL (0 or 1)
        GiftedTalented (0 or 1)
        CTE (0 or 1)
        PersonalGradPlan (0 or 1)
Assessment (0 … n)
        TestName (0 or 1)
            or
        AdditionalTestName (0 or 1)
        TestLevel (0 or 1)
        TestDate (0 or 1)
        ExitRequirementMetDate (0 or 1)
        TestScore (0 or 1)
        TestCode (0 or 1)
        PerformanceLevel(0 or 1)
        AssessmentSubTest (0 … n)
            SubTestName (0 or 1)
            SubTestScore (0 or 1)
Attendance (0 or 1)
        DaysAttended (0 or 1)
        DaysAbsent (0 or 1)
Immunization (0 … n)
        ImmunizationCode (0 or 1)
        ImmunizationDate (0 or 1)
        ImmunizationDose (0 or 1)
DisciplineAction (0 … n)
        DisciplineActionDate (0 or 1)
        DisciplineActionNum (0 or 1)
        DisciplineActionCode (0 or 1)
        DisciplineActionReason (0 or 1)
AcademicStatus (0 or 1)
        GraduationDate (0 or 1)
        SpeechMetDate (0 or 1)
        GraduationDiplomaType (0 or 1)
        CertificateDate (0 or 1)
        TexasGrant (0 or 1)
        DistinguishedAchievements (0 or 1)

AdvancedMeasure (0…4)
FHSPParticipantCode (0 or 1)
FHSPDistingIndicatorCode (0 or 1)
STEMEndorsementCode (0 or 1)
BusinessEndorsementCode (0 or 1)
PublicServiceEndorsementcode (0 or 1)
ArtsEndorsementCode (0 or 1)
MultiStudiesEndorsementCode (0 or 1)
DualCreditType (0… n)
DualCreditCode (1)
    MetDate (1)
BilingBilitType (0… n)
BillingBilitCode (1)
    MetDate (1)
CollegeAssesType (0… n)
CollegeAssesCode (1)
    MetDate (1)
ApIbType (0… n)
ApIbCode(1)
    MetDate (1)
CertLicType (0… n)
CertLicCode (1)
    MetDate (1)
IGCGradReview (0 or 1)
FHSPCollegeCareerInstructionIndicator (0 or 1)
AssociateDegree (0 or 1)
OnRamps (0 or 1)
Section504
POIIMetDate
CPRMetDate(0 or 1)
StarofTexas

CurrentCoursework (0 or 1)
    Course (1 … n)
        CourseTitle (0 or 1)
        CourseID (0 or 1)
        Abbreviation (0 or 1)
        Semester (0 or 1)
        ClassPeriod (0 or 1)
        SubjectArea (0 or 1)
        CourseGrade (0 … n)
        WithdrawGrade (0 or 1)
        GradeAverage (0 or 1)
        CourseCredit (0 or 1)
        PassFailCredit (0 or 1)
        Explanation (0 … n)
        CourseTeacher (0 or 1)
        CreditCampus (0 or 1)
        SemesterSeq (0 or 1)
        FinalGradeAverage (0 or 1)
    SchoolYear (1)
    GradeLevel (1)
AcademicSession (0 … n)
    SchoolYear (1 … n)
    GradeLevel (1)
    Course (1 … n)

CourseTitle (0 or 1)
CourseID (0 or 1)
Abbreviation (0 or 1)
Semester (0 or 1)
ClassPeriod (0 or 1)
SubjectArea (0 or 1)
CourseGrade (0 … n)
WithdrawGrade (0 or 1)
GradeAverage (0 or 1)
CourseCredit (0 or 1)
PassFailCredit (0 or 1)
Explanation (0 … n)
CourseTeacher (0 or 1)
CreditCampus (0 or 1)
SemesterSeq (0 or 1)
FinalGradeAverage (0 or 1)
AcademicSummary (0 or 1)
GPA (0 or 1)
ClassTotalNumber (0 or 1)
ClassRank (0 or 1)
ClassRankingDate (0 or 1)
Quartile (0 or 1)
CollegeCampusCode (0 or 1)