

# **TSDS Technical Course**

## **Module 2: TSDS Texas Education Data Standards (TEDS) and the Client-Side Validation Tool**

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# Course Pre-requisites

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# TEDS Overview

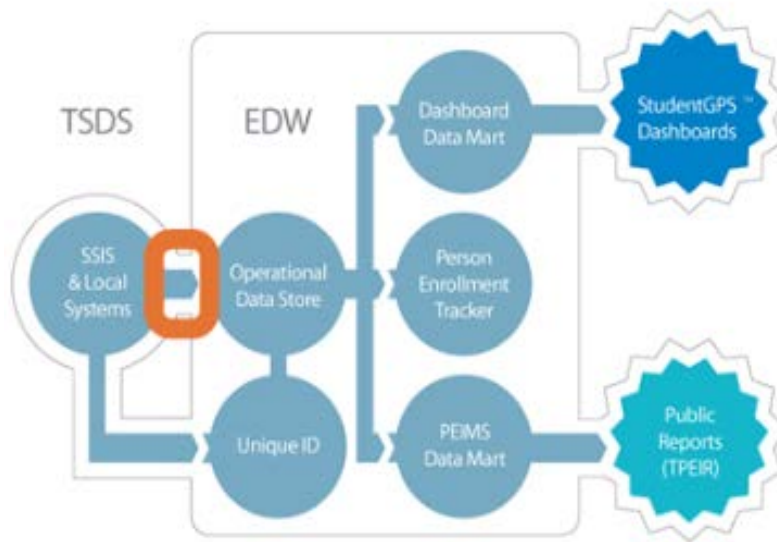


## What is TEDS?

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A set of documented standards that is used by LEAs and vendors to submit PEIMS and studentGPS™ Dashboards data to TEA

- The standards:
  - ▣ Describe the data reporting requirements;
  - ▣ Provide descriptions of data elements and the codes used to report them;
  - ▣ Detail the responsibilities of local education agencies, education service centers, and the Texas Education Agency in connection with the data collection process; and
  - ▣ Provide descriptions of the data collection requirements, including data elements and data edit specifications
  - ▣ [http://www.tea.state.tx.us/TSDS/TEDS/TEDS\\_Latest\\_Release/](http://www.tea.state.tx.us/TSDS/TEDS/TEDS_Latest_Release/)



## Texas Education Data Standards

This page serves as a central location for current and prior years' TEDS. The links below provide access to TEDS for both the TSDS and PEIMS data collections.

TEDS 2015-2016	Released
<a href="#">For LEAs Using TSDS + PEIMS</a>	12/01/2014
<a href="#">For ESCs &amp; LEAs Using TSDS PEIMS Only</a>	12/01/2014
<a href="#">TSDS Unique ID</a>	12/01/2014
<a href="#">TSDS TEDS Change Log(s)</a>	12/01/2014
TEDS 2014-2015	Released
<a href="#">For LEAs Using TSDS + PEIMS</a>	11/11/2014
<a href="#">For ESCs &amp; LEAs Using TSDS PEIMS Only</a>	10/17/2014
<a href="#">TSDS Unique ID</a>	07/01/2014
<a href="#">TSDS Core Collections</a>	11/11/2014
<a href="#">TSDS TEDS Change Log(s)</a>	11/11/2014
TEDS 2013-2014	Released
<a href="#">For LEAs Using TSDS + PEIMS</a>	08/30/2014
<a href="#">For ESCs &amp; LEAs Using TSDS PEIMS Only</a>	08/30/2014
<a href="#">TSDS Unique ID</a>	07/01/2014
<a href="#">TSDS Core Collections</a>	07/01/2014
<a href="#">TSDS TEDS Change Log(s)</a>	08/30/2014
TEDS 2012-2013	Released
<a href="#">TSDS Core Collections</a>	08/30/2014
eDM	Released
<a href="#">eDM Error Dictionary</a>	10/17/2014



## TEDS Sections 1-5



## Section 1: Data Submission Specifications and Responsibilities (Part 1)

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This section provides:

- XML file naming & header requirements
- Hardware requirements
- Interchange Schemas with associated Complex Type chart

	ComplexType	Description	Category	TSDS	PEIMS			
					1 Fall	2 MY	3 Sum	4 EY
Interchange →	InterchangeEducationOrganizationExtension							
	StateEducationAgency	State Education Agency	Education Organization					
→	EducationServiceCenter	Education Service Center	Education Organization		Y	Y		
Complex Types	FeederSchoolAssociation	Feeder Campus	Education Organization					
→	LocalEducationAgencyExtension	School District and Charter Schools	Education Organization	Y	Y	Y	Y	Y
	School	Campus	Education Organization	Y	Y	Y	Y	Y
→	Location	Education Organization Location	Education Organization	Y				
	ClassPeriod	Class Periods	Education Organization	Y			Y	
	Course	Campus Course Section	Education Organization	Y	Y		Y	Y
	CompetencyLevelDescriptor	Assessed Competencies	Education Organization					
	Program	Programs	Education Organization	Y				



## Section 1: Data Submission Specifications and Responsibilities (Part 2)

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### □ Data Category With Associated Complex Types Chart

Category	ComplexType	Description	InterchangeSchema	TSDS	PEIMS			
					1 Fall	2 MY	3 Sum	4 EY
→	Education Organization Category							
	StateEducationAgency	State Education Agency	InterchangeEducationOrganizationExtension					
→	EducationServiceCenter	Education Service Center	InterchangeEducationOrganizationExtension	Y	Y	Y		
→	LocalEducationAgencyExtension	School District and Charter Schools	InterchangeEducationOrganizationExtension	Y	Y	Y	Y	Y
Complex								
→	SSAOrgAssociationExtension	Shared Service Arrangement Fiscal Agent	InterchangeSSAOrganizationAssociationExtension		Y	Y		
	School	Campus	InterchangeEducationOrganizationExtension	Y	Y	Y	Y	Y



## Section 1: Data Submission Specifications and Responsibilities (Part 3)

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- Submission and Resubmission Timelines for Early Adopters
- Describes the various responsibilities of the LEA, Superintendent, ESC and TEA:
  - ▣ LEA – e.g. Submitting current, complete, and accurate data for all XML complex types required for each collection (the Dashboard data collection is optional)
  - ▣ Superintendent – Submitting the electronic "Superintendent's Statement of Approval of Summary Report and Error Listing" (SAF) for each submission and resubmission based on the final review of the LEA's PEIMS data file



## Section 1: Data Submission Specifications and Responsibilities (Part 4)

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- ESCs – e.g. Assisting LEAs with their PEIMS data submissions to the TSDS PEIMS system in order to meet published deadlines
- Texas Education Agency – e.g. Facilitating the instructional process

For LEAs Using studentGPS™ Dashboards + PEIMS, see:

<http://castro.tea.state.tx.us/tsds/teds/2014A/v2.0/teds-ds1.pdf>

For ESCs & LEAs Using TSDS PEIMS Only, see:

<http://castro.tea.state.tx.us/tsds/teds/2014A/v2.0/ds8/teds-peims-ds8.1.pdf>

- This section provides:
  - ▣ Data Submission - Categories
  - ▣ A chart of the Data File Layouts
  - ▣ A chart of the Complex Types and associated collection(s)
  - ▣ A description of each complex type in the Ed-Fi Core and Texas Core Extension schemas
  - ▣ The business rules, reporting requirements and data samples



## Section 2: Data Submission - Categories

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There are 7 Categories of data reporting; 5 of which are used for PEIMS. In legacy PEIMS, these were referred to as Record Types. The chart below illustrates that Cohort and Student Assessment data is not reported for PEIMS but data associated with these categories can be submitted for display on the studentGPS™ Dashboards.

[http://www.tea.state.tx.us/TSDS/TEDS/TEDS\\_Section\\_2\\_-\\_Data\\_Submission\\_Requirements\\_by\\_Category/](http://www.tea.state.tx.us/TSDS/TEDS/TEDS_Section_2_-_Data_Submission_Requirements_by_Category/)

Category	PEIMS	TSDS
Education Organization	X	X
Finance	X	X
Staff	X	X
Student	X	X
Campus Course Section	X	X
Assessment		X
Cohort		X



## Section 3: Description of Data Elements

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- This section provides:
  - ▣ Detailed technical specifications for each data element
  - ▣ List of data elements not used by TEA
  - ▣ List of data elements not for Texas use at this time (Potential Future Use)



## Example Data Element: Behavior Location Code

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Element ID	Data Element		Date Issued	Date Updated
E1083	BEHAVIOR-LOCATION-CODE		03/01/2012	12/3/2012
XML Name		Complex Type		
TX-BehaviorLocation		DisciplineIncidentExtension		
Definition				
BEHAVIOR-LOCATION-CODE indicates where a student committed an applicable offense that is enumerated in Texas Education Code 37.006 or 37.007. (On/off campus, school related activities, etc...)				
Special Instructions				
This code is not reported for local code of conduct violations.				
Data Specifications				
Code Table ID	Mandatory in XML		Domain of Values	
C190	NO			
Length	Data Type		Pattern:	
2	CODED		##	
PEIMS Reporting				
PEIMS Element	Collection Period	Is Collected	Mandatory	Can be Blank
YES	1	NO	NO	YES
	2	NO	NO	YES
	3	YES	YES	NO
	4	NO	NO	YES
TSDS Reporting				
TSDS Element		Mandatory		
NO		NO		
This data element is also included in the following complex type(s):				



## Section 4: Description of Codes

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This section provides:

- An alphabetical listing of the names of the code tables used with the data elements described in TEDS Section 3
- Translations of the code values & an explanation (where necessary)





## Code Table: Behavior Location Code

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Code Table ID	Name	XML Name	Date Issued	Date Updated
C190	BEHAVIOR-LOCATION-CODE	TX-BehaviorLocationType	3/1/2012	
Code	Translation			
00	Not Applicable			
01	On Campus			
02	Off Campus, but within 300 feet of campus property line			
03	Off Campus, but at a school sponsored or school related activity			
04	Off Campus, and further than 300 feet from the campus boundary (Student was not in attendance at a school sponsored or school related activity)			
05	On campus of another school district, or while in attendance at a school sponsored or school related activity of another school district			



## Section 5: TEDS Business Rules

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- This section defines the business rules and validations that are applied to submitted data. When data does not pass validation one of the following error level results are possible:
  - ▣ **F = fatal, S = special warning, and W = warning**



## Business Rule for Behavior Location Code

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Former Edit #	Rule #	Rule Text / Business Meaning	Error Level	Dash board	PEIMS Sub	Rule Applies To			
						ESC	District	Campus	Charter
42576	44425-0050	If DISCIPLINARY-ACTION-REASON-CODE is "21"-"23", "33"-"34", "41"-"45", "55"-"56", then BEHAVIOR-LOCATION-CODE must be "00".	F		3		X	X	X
		If a student is reported with a TX-DisciplinaryActionReason for which the Texas Education Code Chapter 37 does not specify a location, then the TX-BehaviorLocation must be reported as "not applicable".							
42577	44425-0051	If DISCIPLINARY-ACTION-REASON-CODE is "09" or "10", then BEHAVIOR-LOCATION-CODE must be "04".	F		3		X	X	X



## TEDS Sections 6-10

- Ed-Fi Core Schema:
  - ▣ A third-party XML-based schema provided by the Michael & Susan Dell Foundation (MSDF) that will be used as a national standard
  - ▣ Maintained and published by MSDF



# Ed-Fi Core Schema Snapshot

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```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- (c) 2011 Michael & Susan Dell Foundation. All Rights Reserved. -->
<!-- Ed-Fi Core Version 1.0.01 December 20, 2011 -->
<!-- Version history: -->
<!-- 2014.F.1.0 03/01/2012 Final Draft Version -->
<!-- 2014.A.1.0 07/01/2012 TEDS Addendum Draft Version -->
<!-- 2014.P.2.0 12/03/2012 TEDS Preliminary Version -->
<!-- 2014.F.2.0 03/01/2013 TEDS Final Version -->
<!-- 2014.A.2.0 07/01/2013 TEDS Addendum Version -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="http://www.tea.state.tx.us/tsds" targetNamespace="http://www.tea.state.tx.us/tsds" elementFormDefault="qualified"
attributeFormDefault="unqualified">
- <xs:annotation>
  <xs:documentation>===== Ed-Fi-Core Version 1.0.01 December 20, 2011 ===== Ed-Fi Version History 1.0 6/28/11 Release for Comment 1.0 8/28/11 Proposed response to RFC 1.0 10/7/11 Close of
  RFC Period 1.0 10/17/11 Release 1.0 Candidate A 1.0 11/11/11 Release 1.0 1.0 12/20/11 Errata .01</xs:documentation>
</xs:annotation>
- <xs:annotation>
  <xs:documentation>===== Domain Entities =====</xs:documentation>
</xs:annotation>
- <xs:complexType name="AcademicWeek">
- <xs:annotation>
  <xs:documentation>This entity represents the academic weeks for a school year, optionally captured to support analyses.</xs:documentation>
</xs:annotation>
- <xs:complexContent>
- <xs:extension base="ComplexObjectType">
- <xs:sequence>
  - <xs:element name="WeekIdentifier" type="WeekIdentifier" minOccurs="0">
    - <xs:annotation>
      <xs:documentation>The school label for the week.</xs:documentation>
    </xs:annotation>
  </xs:element>
  - <xs:element name="BeginDate" type="xs:date" minOccurs="0">
    - <xs:annotation>
      <xs:documentation>The start date for the academic week.</xs:documentation>
```



## Section 6: TX-Core Extension Schema

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TX-Core Extension Schema:

- Includes complex types that are either unique to TX or extensions to existing Ed-Fi Core complex types which comprise a Texas specific data standard
- Is maintained and published by TEA



# TX-Core Extension Schema Snapshot

23

```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- Texas Core Extension Version History -->
<!-- 1.0 12/01/2011 Preliminary Draft Version -->
<!-- 2014.F.1.0 03/01/2012 Final Draft Version -->
<!-- 2014.F.1.1 05/07/2012 Final Draft Version -->
<!-- 2014.A.1.0 07/01/2012 TEDS Addendum Draft Version -->
<!-- 2014.A.1.1 09/17/2012 TEDS Addendum Draft Version 1.1 -->
<!-- 2014.P.2.0 12/03/2012 TEDS Preliminary Version -->
<!-- 2014.F.2.0 03/01/2013 TEDS Final Version -->
<!-- 2014.A.2.0 07/01/2013 TEDS Addendum Version -->
- <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="http://www.tea.state.tx.us/tsds" targetNamespace="http://www.tea.state.tx.us/tsds" elementFormDefault="qualified"
  attributeFormDefault="unqualified">
  <xs:include schemaLocation="Ed-Fi-Core.xsd" />
  - <xs:annotation>
    <xs:documentation>===== Texas Core Extension Addendum Version 2014.A.2.0 =====</xs:documentation>
  </xs:annotation>
  - <xs:annotation>
    <xs:documentation>===== State-Specific Extensions =====</xs:documentation>
  </xs:annotation>
  - <xs:annotation>
    <xs:documentation>----- State-Specific Domain Type Extensions -----</xs:documentation>
  </xs:annotation>
  - <xs:complexType name="ActualExtension">
    - <xs:annotation>
      <xs:documentation>The ActualExtension financial entity represents the sum of the financial transactions to date relating to a specific account.</xs:documentation>
    </xs:annotation>
    - <xs:sequence>
      - <xs:element name="TX-LEAReference" type="EducationalOrgReferenceType" minOccurs="0">
        - <xs:annotation>
          <xs:documentation>This association denotes the LEA with which the account, its budget, transactions, and actuals are associated.</xs:documentation>
        </xs:annotation>
      </xs:element>
```





## Section 7: Interchange Schemas

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- This section includes:
  - ▣ Individual interchange schemas and their definitions
  - ▣ Collection Requirements
  - ▣ Data samples for each interchange
- These interchange schemas will be used to load data into the EDW



# InterchangeStudentExtension

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```
<?xml version="1.0" encoding="UTF-8" ?>
- <xs:schema xmlns="http://www.tea.state.tx.us/tsds" xmlns:xs="http://www.w3.org/2001/XMLSchema" targetNamespace="http://www.tea.state.tx.us/tsds" elementFormDefault="qualified"
  attributeFormDefault="unqualified">
  <xs:include schemaLocation="..\Ed-Fi-Core.xsd" />
  <xs:include schemaLocation="..\TX-Core-Extension.xsd" />
- <xs:annotation>
  <xs:documentation>===== InterchangeStudent Version History===== 1.0 12/01/2011 Preliminary Draft Version 2014.F.1.0 03/01/2012 Final Draft Version 2014.F.1.1 05/07/2012 Final Draft Version
    2014.F.1.2 06/04/2012 Final Draft Version</xs:documentation>
</xs:annotation>
- <xs:annotation>
  <xs:documentation>===== Student Interchange Model =====</xs:documentation>
</xs:annotation>
- <xs:element name="InterchangeStudent">
- <xs:annotation>
  <xs:documentation>This interchange is to load student basic information and demographics.</xs:documentation>
</xs:annotation>
- <xs:complexType>
- <xs:sequence maxOccurs="unbounded">
  <xs:element name="Student" type="StudentExtension" />
  </xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>
```



# StudentExtension Complex Type Collection Requirements

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## StudentExtension Complex Type

Element ID	Data Element	XML Name	TSDS	M	PEIMS				Potential Future Use
					1	2	3	4	
**	Reference Type	(a) id	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E1523	TX-UNIQUE-STUDENT-ID	StudentUniqueStateId	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
**	Complex Type	StudentIdentificationCode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E1090	STUDENT-IDENTIFICATION-SYSTEM	(a) IdentificationSystem	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E1510	STUDENT-ASSIGNING-ORGANIZATION-CODE	(a) AssigningOrganizationCode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E0001	STUDENT-ID	IdentificationCode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E1090	STUDENT-IDENTIFICATION-SYSTEM	(a) IdentificationSystem	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E1510	STUDENT-ASSIGNING-ORGANIZATION-CODE	(a) AssigningOrganizationCode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E0923	LOCAL-STUDENT-ID	IdentificationCode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
**	Complex Type	Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E1301	VERIFICATION	(a) Verification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



# Interchange Student Extension - Example

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```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- FEIMS InterchangeStudentExtension Data Sample Version History -->
<!-- 2014.P.2.0 12/03/2012 Preliminary Version -->
<!-- 2014.A.2.0 07/01/2013 Addendum Version -->
<!-- FEIMS InterchangeStudentExtension Sample XML file generated by XMLSpy v2011 rel. 3 spl (http://www.altova.com) -->
- <InterchangeStudent xsi:schemaLocation="http://www.tea.state.tx.us/tsds InterchangeStudentExtension.xsd" xmlns="http://www.tea.state.tx.us/tsds" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
- <Student>
  <StudentUniqueStateId>0123456789</StudentUniqueStateId>
  - <StudentIdentificationCode IdentificationSystem="State">
    <IdentificationCode>S00005678</IdentificationCode>
  </StudentIdentificationCode>
  - <StudentIdentificationCode IdentificationSystem="Local">
    <IdentificationCode>123456789</IdentificationCode>
  </StudentIdentificationCode>
  - <Name>
    <FirstName>Jane</FirstName>
    <MiddleName>Lee</MiddleName>
    <LastSurname>Student</LastSurname>
  </Name>
  - <BirthData>
    <BirthDate>1999-08-13</BirthDate>
  </BirthData>
  - <TX-LEAReference>
    - <EducationalOrgIdentity>
      <StateOrganizationId>999901</StateOrganizationId>
    </EducationalOrgIdentity>
    <TX-LEAReference>
      <TX-Sex>F</TX-Sex>
      <TX-HispanicLatinoEthnicity>0</TX-HispanicLatinoEthnicity>
    </TX-LEAReference>
  - <TX-Race>
    <TX-AmericanIndianAlaskaNative>0</TX-AmericanIndianAlaskaNative>
    <TX-Asian>0</TX-Asian>
    <TX-BlackAfricanAmerican>0</TX-BlackAfricanAmerican>
    <TX-NativeHawaiianPacificIslander>0</TX-NativeHawaiianPacificIslander>
    <TX-White>1</TX-White>
  </TX-Race>
  - <TX-StudentCharacteristics>
    <TX-ADAEligibility>1</TX-ADAEligibility>
    <TX-AtRiskStudent>0</TX-AtRiskStudent>
    <TX-HomelessStatus>04</TX-HomelessStatus>
    <TX-ImmigrantIndicator>0</TX-ImmigrantIndicator>
    <TX-LEPIndicator>0</TX-LEPIndicator>
    <TX-MigrantIndicator>0</TX-MigrantIndicator>
    <TX-PKFosterCareIndicator>0</TX-PKFosterCareIndicator>
    <TX-PKMilitaryIndicator>1</TX-PKMilitaryIndicator>
    <TX-SSIPromotionRetention>04</TX-SSIPromotionRetention>
    <TX-UnschooledAsyleeRefugeeIndicator>0</TX-UnschooledAsyleeRefugeeIndicator>
  </TX-StudentCharacteristics>
  <TX-HomeLanguage>98</TX-HomeLanguage>
  <TX-AsOfStatusCode>B</TX-AsOfStatusCode>
  <TX-EconomicDisadvantaged>00</TX-EconomicDisadvantaged>
</Student>
</InterchangeStudent>
```



## Section 8: For ESCs & LEAs Using TSDS PEIMS Only

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- This section is for exclusive use by ESCs and LEAs who are only using TSDS PEIMS and not using studentGPS™ Dashboards
- All documentation needed for PEIMS data submission is contained within this section
- [http://www.tea.state.tx.us/TSDS/TEDS/TEDS\\_Latest\\_Release/](http://www.tea.state.tx.us/TSDS/TEDS/TEDS_Latest_Release/)



## Section 9: TSDS Unique ID Specifications

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- This section includes the TSDS Unique ID:
  - ▣ Batch file format
  - ▣ Web Services Technical Guide
  - ▣ Instructions on Near Match resolution
  - ▣ Instructions for online and batch search
  - ▣ Web services layouts

<http://castro.tea.state.tx.us/tsds/teds/2014A/v2.0/ds9/teds-ds9.pdf>



## Section 10: TSDS Core Collections

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- This section includes the collection specifications for the TSDS Core Collections.
- These specifications will be used by the LEAs for state, federal and optional reporting.

### Section 10 - TSDS Core Collections

The TSDS Collection will be used by the LEAs for state, federal, and optional reporting called 'Core Collections'. This section details the collection specifications for the core collections.

State Reporting	Template	Released
<a href="#">Early Childhood Data System</a>	<a href="#">ECDS Collection Template</a>	04/07/2014

Federal Reporting	Released

Optional Reporting	Released
studentGPS™ Dashboards	

Additional information on TEDS can be found in the appendices:

For LEAs Using studentGPS™ Dashboards + PEIMS, see:

[http://www.tea.state.tx.us/TSDS/TEDS/TEDS\\_Appendices/](http://www.tea.state.tx.us/TSDS/TEDS/TEDS_Appendices/)

For ESCs & LEAs Using TSDS PEIMS Only, see:

[http://www.tea.state.tx.us/TSDS/TEDS/TEDS-PEIMS\\_Appendices/](http://www.tea.state.tx.us/TSDS/TEDS/TEDS-PEIMS_Appendices/)





# TSDS PEIMS Transition



## Comparing Data Samples of Legacy PEIMS & TSDS PEIMS

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### 010 ORGANIZATION DATA – DISTRICT

Record Type Code	District ID	District Name	...
E0755	E0212	E0213	...
C042			
Columns 1 – 3	Columns 4 – 9	Columns 10 – 43	Columns 44 – 80
010			
010			

Sample:

010999901Learning ISD...

### Texas Core Extension - LocalEducationAgencyExtension Complex Type

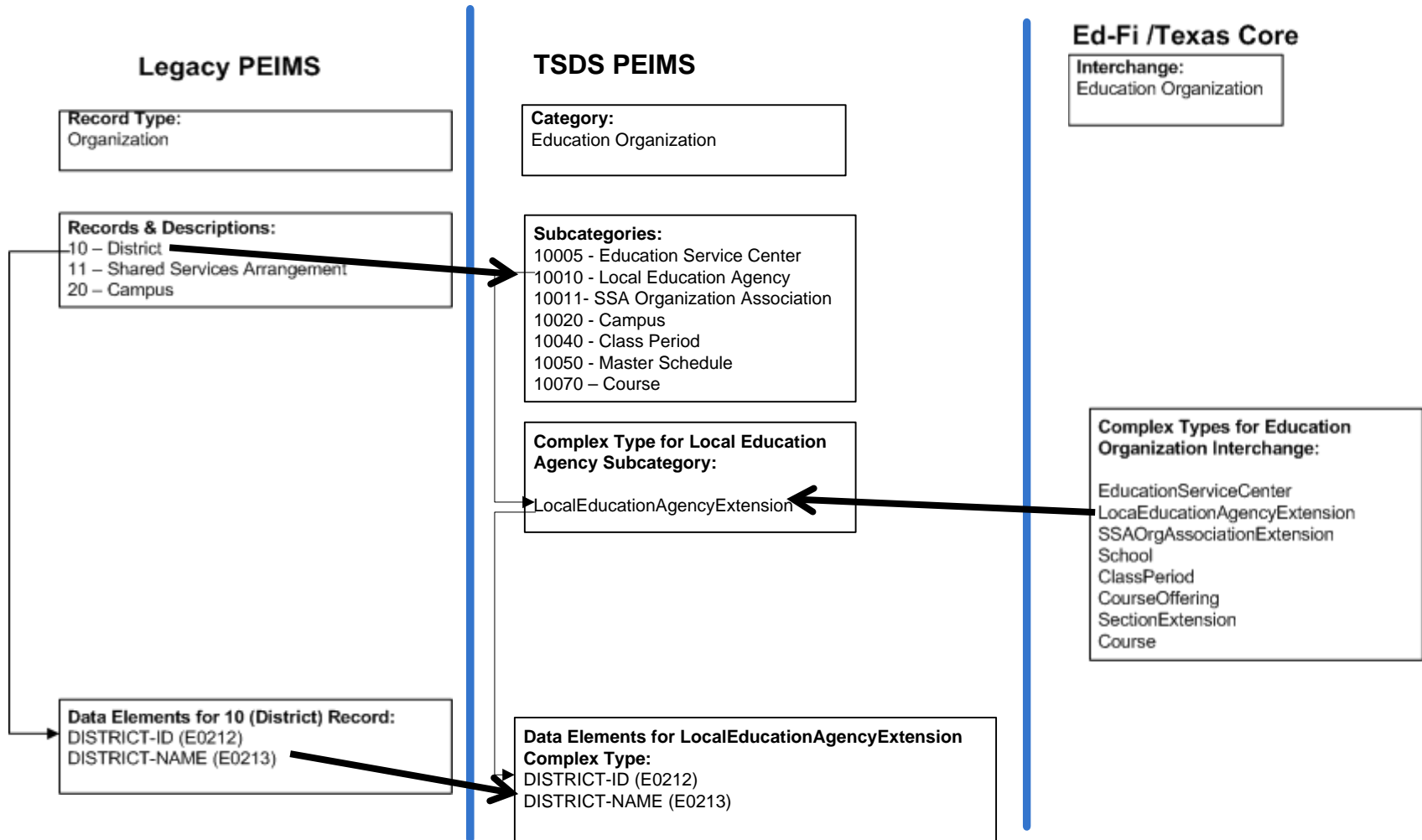
```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- PEIMS InterchangeEducationOrganizationExtension Data Sample Version History -->
<!-- 2014.P.2.0 12/03/2012 Preliminary Version -->
<!-- 2014.A.2.0 07/01/2013 Addendum Version -->
<!-- PEIMS LocalEducationAgencyExtension Sample XML file generated by XMLSpy v2010 rel. 3 sp1 (http://www.altova.com) -->
- <InterchangeEducationOrganization
  xsi:schemaLocation="http://www.tea.state.tx.us/tsds
  InterchangeEducationOrganizationExtension.xsd"
  xmlns="http://www.tea.state.tx.us/tsds"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <!-- A data sample of the Local Education Agency for PEIMS. -->
  - <LocalEducationAgency>
    <StateOrganizationId>999901</StateOrganizationId>
    <NameOfInstitution>Learning ISD</NameOfInstitution>
    - <OrganizationCategories>
      <OrganizationCategory>Local Education Agency</OrganizationCategory>
    </OrganizationCategories>
    </LocalEducationAgency>
  </InterchangeEducationOrganization>
```

<http://castro.tea.state.tx.us/tsds/teds/2014A/v2.0/ds8/PEIMS-InterchangeEducationOrganizationExtension.xml>



# Transitioning from Legacy PEIMS to TSDS PEIMS

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## TEDS – Common Terms

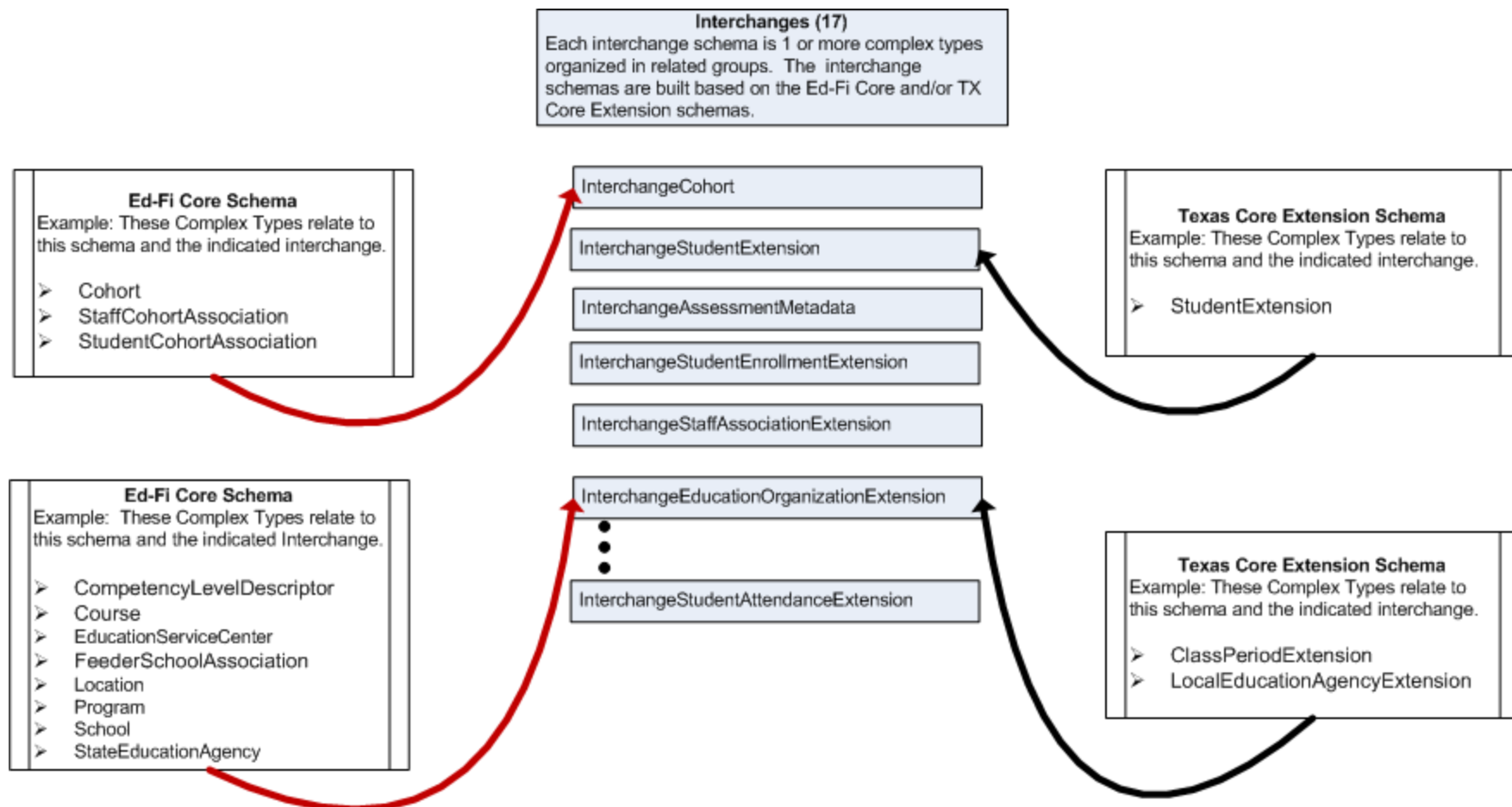
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- Category – a grouping of sub categories that are related; in legacy PEIMS these are referred to as Record Types
- Sub Category – a grouping of complex types that are related; in legacy PEIMS these are referred to as Records
- Complex Type – a grouping of one or more data elements that comprise specific information
- Interchange – XML Schema Definitions (XSDs) which group related complex types from the Ed-Fi Core and/or Texas Core Extension XSDs.
- Simple Types – defines the restrictions and enumerations for a data element.
- Data Element – a single unit of data e.g. First Name, District ID



# Schemas and Interchanges

- Think of the schemas as the building blocks of complex types that will be used to make up every data element within TEDS. There are two schemas used in TEDS:
  - ▣ EdFi Core:
    - A third-party XML-based schema provided by the Michael & Susan Dell Foundation (MSDF) that will be used as a national standard
    - Maintained & published by MSDF
  - ▣ TX Core Extension:
    - Includes complex types that are either unique to Texas or extensions to existing Ed-Fi Core complex types which comprise a Texas specific data standard
    - Maintained and published by TEA



- Interchanges are XML Schema Definitions (XSDs) which group related complex types from the Ed-Fi Core Schema and/or Texas Core Extension Schema.
- There are 17 interchanges that are used by Education Organizations to load data into the ODS.
- For referential integrity, they must be submitted in the order displayed on the following slides.



[http://www.tea.state.tx.us/TSDS/TEDS/TEDS\\_Section\\_7\\_-\\_Interchange\\_Schemas/](http://www.tea.state.tx.us/TSDS/TEDS/TEDS_Section_7_-_Interchange_Schemas/)

Interchange	PEIMS Collections	TSDS
InterchangeEducationOrganizationExtension	1, 2, 3, 4	Y
InterchangeEducationOrgCalendar	N/A	Y
InterchangeMasterScheduleExtension	3, 4	Y
InterchangeStudentExtension	1, 3, 4	N/A
InterchangeStudentParentExtension	N/A	Y
InterchangeStudentEnrollmentExtension	1, 3, 4	Y
InterchangeStaffAssociationExtension	1, 3	Y
InterchangeStudentAttendanceExtension	3, 4	Y

Interchange	PEIMS Collections	TSDS
InterchangeStudentDisciplineExtension	3	Y
InterchangeStudentGradeExtension	3, 4	Y
InterchangeStudentProgramExtension	1, 3, 4	Y
InterchangeAssessmentMetadata	N/A	Y
InterchangeStudentAssessment	N/A	Y
InterchangeStudentCohort	N/A	Y
InterchangeSSAOrganizationAssociationExtension	1, 2	N
InterchangeFinanceExtension	1, 2	N
InterchangeStudentRestraintEventExtension	3	N



# Comparing Legacy PEIMS to TSDS PEIMS Submission Requirements

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## Legacy PEIMS Submission Requirements for Organization Record Types:

Record Type	Record Code	Submission 1	Submission 2	Submission 3	Submission 4
District	010	X	X	X	X
Shared Services Arrangement	011	X	X		
Campus	020	X	X	X	X

## TSDS PEIMS TEDS Submission Requirements for Education Organization Category:

				PEIMS			
ComplexType		Description	InterchangeSchema	1 Fall	2 MY	3 Sum	4 EY
<b>Education Organization Category</b>							
10005	EducationServiceCenter	Education Service Center	InterchangeEducationOrganizationExtension	Y	Y		
10010	LocalEducationAgencyExtension	School District and Charter Schools	InterchangeEducationOrganizationExtension	Y	Y	Y	Y
10011	SSAOrgAssociationExtension	Shared Service Arrangement Fiscal Agent	InterchangeSSAOrganizationAssociationExtension	Y	Y		
10020	School	Campus	InterchangeEducationOrganizationExtension	Y	Y	Y	Y



# Complex Types and Data Elements

- Are used in building interchange schemas
- A grouping of related data elements that comprise specific information
- Complex types may include individual data elements and/or other complex types
  - ▣ Complex Type Name includes the following data elements:
    - First Name, Middle Name, Last Name, Generation Code Suffix



## Education Service Center Complex Type

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- This is the new subcategory under the Organization Category that does not have an equivalence in legacy PEIMS. There was no 5 record type; ESCs reported themselves in the 10 record in legacy PEIMS.
- The EducationServiceCenter Complex Type represents a regional, multi-services public agency authorized by State law to develop, manage, and provide services, programs, or other options support (e.g., construction, food services, and technology services) to LEAs.
- It includes the following data elements & complex type:
  - Education Service Center ID (data element)
  - Education Service Center Name (data element)
  - Organization Category (complex type)



# Education Service Center Complex Type

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## EducationServiceCenter Complex Type

Element ID	Data Element	XMLName	XML Simple Type Name	PEIMS								Len	Data Type	Code Table ID
				1	1 M	2	2 M	3	3 M	4	4 M			
**	Reference Type	id											STRING	
E1091	EDUCATION-SERVICE-CENTER-ID	StateOrganizationId	IdentificationCode	Y	Y	Y	Y					6	CODED	
**	Complex Type	EducationOrgIdenti ficationCode	EducationOrgIdentifica tionCode											
E1086	EDUCATION-SERVICE-CENTER-NAME	NameOfInstitution	NameOfInstitution	Y	Y	Y	Y					75	NAMEFIE LD	
E1236	SHORT-NAME-OF- INSTITUTION	ShortNameOfInstituti on	NameOfInstitution											
**	Complex Type	OrganizationCategori es	EducationOrganization CategoryType	Y	Y	Y	Y							
E1240	ORGANIZATION-CATEGORY	OrganizationCategor y	EducationOrganization CategoriesType	Y	Y	Y	Y					24	STRING	DC055

Here is a link to the document above:

<http://castro.tea.state.tx.us/tsds/teds/2014A/v2.0/ds8/teds-peims-ds8.2.1.pdf>

- Specifies the valid codes and the decode values for a specific data element

Code Table ID	Name	XML Name	Date Issued	Date Updated
DC055	EDUCATION-ORGANIZATION-CATEGORY-TYPE	EducationOrganizationCategoryType	3/1/2012	
Code	Translation			

01 State Education Agency

02 Education Service Center

03 Local Education Agency

04 School







# Data Sample: Education Service Center

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```
<?xml version="1.0" encoding="UTF-8" ?>
<!-- PEIMS InterchangeEducationOrganizationExtension Data Sample Version History -->
<!-- 2014.P.2.0 12/03/2012 Preliminary Version -->
<!-- 2014.A.2.0 07/01/2013 Addendum Version -->
<!-- PEIMS EducationServiceCenter Sample XML file generated by XMLSpy v2010 rel. 3 sp1 (http://www.altova.com) -->
- <InterchangeEducationOrganization xsi:schemaLocation="http://www.tea.state.tx.us/tsds InterchangeEducationOrganizationExtension.xsd" xmlns="http://www.tea.state.tx.us/tsds"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <!-- A data sample of the Education Service Center for PEIMS. -->
  - <EducationServiceCenter>
    <StateOrganizationId>999950</StateOrganizationId>
    <NameOfInstitution>Texas Education Service Center</NameOfInstitution>
    - <OrganizationCategories>
      <OrganizationCategory>Education Service Center</OrganizationCategory>
    </OrganizationCategories>
  </EducationServiceCenter>
</InterchangeEducationOrganization>
```

[http://castro.tea.state.tx.us/tsds/eds/2014A/v2.0/data\\_samples/PEIMS-EO-EducationServiceCenterDataSample.xml](http://castro.tea.state.tx.us/tsds/eds/2014A/v2.0/data_samples/PEIMS-EO-EducationServiceCenterDataSample.xml)



# Simple Types

- Defines the data element:

```
<xs:element name="NameOfInstitution" type="NameOfInstitution" minOccurs="0">
```

<http://castro.tea.state.tx.us/tsds/eds/2014A/v3.0/Ed-Fi-Core.xsd>

- Defines the restrictions for the data element, for example:

```
<xs:simpleType name="NameOfInstitution">  
  - <xs:annotation>  
    <xs:documentation>The full, legally accepted name of the institution.</xs:documentation>  
  </xs:annotation>  
  - <xs:restriction base="xs:string">  
    <xs:minLength value="1" />  
    <xs:maxLength value="75" />  
  </xs:restriction>  
</xs:simpleType>
```

<http://castro.tea.state.tx.us/tsds/eds/2015P/v1.0/Ed-Fi-Core.xsd>

- Define the enumerated values for a data element, for example:

```

- <xs:simpleType name="EducationOrganizationCategoryType">
-   <xs:annotation>
-     <xs:documentation>The classification of the education agency within the geographic boundaries of a state according to the level of administrative and operational control granted by the
state.</xs:documentation>
-   </xs:annotation>
-   <xs:restriction base="xs:token">
-     <xs:enumeration value="State Education Agency" />
-     <xs:enumeration value="Education Service Center" />
-     <xs:enumeration value="Local Education Agency" />
-     <xs:enumeration value="School" />
-   </xs:restriction>

```

<http://castro.tea.state.tx.us/tsds/teds/2014A/v3.0/Ed-Fi-Core.xsd>

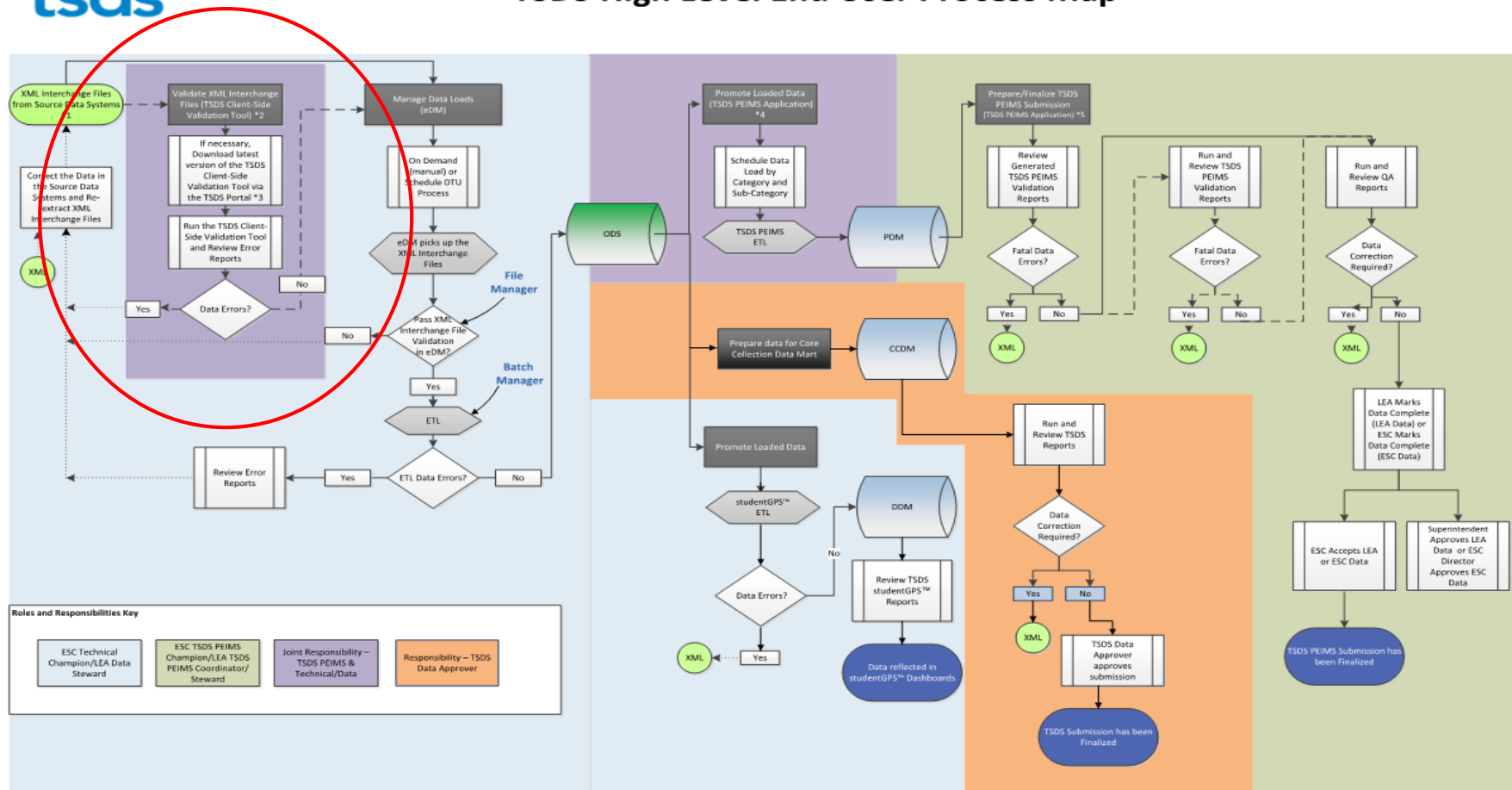
- Enumerated values are derived from Code Tables:

Code Table ID	Name	XML Name	Date Issued	Date Updated
DC055	EDUCATION-ORGANIZATION-CATEGORY-TYPE	EducationOrganizationCategoryType	3/1/2012	
Code	Translation			
01	State Education Agency			
02	Education Service Center			
03	Local Education Agency			
04	School			



# TSDS Validation Tool

## TSDS High Level End User Process Map



<http://www.tea.state.tx.us/Workarea/DownloadAsset.aspx?id=25769810585>



# Overview of Data Loading Process

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**LEA Source Systems**

- Interchange extracts are created from source systems in XML format
- Must align with TEDS



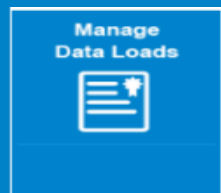
**Client Side Validation Tool**

- Downloaded from TSDS Portal
- Used by LEAs & ESCs to validate XML interchanges prior to loading
- Errors in interchanges must be corrected in source systems & revalidated



**Data Transfer Utility (DTU)**

- A secure FTP file transfer client utility
- Downloaded from TSDS Portal & installed at LEA/ESC
- Facilitates On Demand & Scheduled file transfers
- Sends XML files to eDM
- Uses Service Account credentials for login & password
- User selects files to be transferred
- File name is validated
- User can view transfer status



**eDM (Manage Data Loads)**

- Automatically picks up files that have been transferred by the DTU
- Runs files through data validations & updates the ODS
- Users can also manually upload files
- Error files are generated at initial file validation & again during ETL process
- Errors in interchanges must be corrected in source systems & revalidated
- User can verify that the ODS has been updated by viewing status in the eDM



**PEIMS Application**

- User schedules and can monitor the promotion of data from the ODS to the PDM
- User specifies collection and submission (e.g. Fall, First)
- User selects Category (e.g. Staff) and Sub Category(ies) to be loaded (e.g. Employment Payroll Summary)
- User can monitor the status



**Dashboards Data Mart**

- Data is loaded from ODS to a staging DDM
- If load successful, then it is moved to the production DDM for studentGPS™ display
- Metric calculations occur during the load of data from the ODS to the DDM
- Data is automatically refreshed nightly, no user interaction needed
- System will prevent incomplete data from being loaded



**ECDS Application**

- Early Childhood Data submission for kinder and pre-k
- Charter and Public Schools
- Data Collected include; demographic and, Assessment,
- Data is converted for ODS loading



## TSDS Client-Side Validation Tool Overview

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- The TSDS Client-Side Validation Tool is a standalone tool available in the local environment of Campuses, LEAs and ESCs to validate the XML interchange files against the TEDS standards before submitting the files to the Texas Student Data System (TSDS)
- The TSDS Client-Side Validation Tool will help identify data errors earlier, prior to uploading TSDS PEIMS and studentGPS™ Dashboards data to the ODS, ultimately enhancing data quality in the long-term
- The Tool will check the structure of the XML interchange files and perform certain business rule checks as applicable
- The TSDS Client-Side Validation Tool is a free tool for TSDS users available for download from the TSDS Portal. There are no licensing costs for the end users
- The downloadable package will consist of the TSDS Client-Side Validation Tool application and the collection specific validation package





## TSDS Client-Side Validation Tool Benefits

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- The TSDS Client-Side Validation Tool includes more validations than any previous PEIMS validation software (like the XML Checker). It doesn't just check XML formatting and field specifications; it also checks PEIMS business rules and some referential integrity.
- LEAs can catch errors earlier in the process so they don't have to repeatedly load to TEA to identify problems—issues can be identified and fixed locally
- The tool will allow users to work on their collections well in advance of the submission deadline, which will reduce the burden on some LEAs
- By reducing the traffic and storage for erroneous data, the Validation Tool will reduce unnecessary wear and tear and congestion on the TSDS system



# Download, Install and Navigate

- ❑ Log in via the TSDS Portal using your TEAL username and password
- ❑ Select the Texas Student Data System Portal from the list of applications



The screenshot shows the TEA Login (TEAL) page. At the top left is the Texas state map logo with a gold star. To its right is the text "TEXAS EDUCATION AGENCY". Below the logo is the heading "TEA Login (TEAL)". A notice states: "NOTICE: TEA Web Applications will not be available each Sunday morning from 5:00am to 2:00pm due to routine maintenance. Please do not access your applications during this time period. You could lose data." Below the notice is a link: "Don't have an account? [Request New User Account](#)". There are two input fields: "Username:" and "Password:". The "Password:" field has a "Show Password" button to its right. Below the fields is a "Login" button. At the bottom, there is a link: "To log in, type your username and password and then click 'Login'. Please refer to the [help documentation](#) for more information." and a link: "Online User Training".

## Agency

Welcome, Lisa McNicholas



### Applications

#### Texas Student Data System Portal

Texas Student Data System Portal

[Texas Student Data System Portal](#)

[Add/Modify Access](#)

TEA - Statewide Data Initiatives/PEIMS  
Roles: Uniq-ID LEA, PEIMS Data Submitter, PEIMS Data Sched/Loader, PEIMS Data Completer, PEIMS Data Approver, PEIMS Data Acceptor, ODS Data Loader, TSDS studentGPS Dashboards, TSDS studentGPS Dashboards Configurator

[www.tea.state.tx.us](http://www.tea.state.tx.us)



# TSDS Portal Access: Utilities

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**Welcome**

The Texas Student Data System (TSDS) is a data collection and reporting system that improves and standardizes Texas education data collection and management processes and equips educators with timely, actionable, and historical student data to drive classroom and student success.

TSDS replaces and expands on the existing Public Education Information Management System (PEIMS).

It includes the optional studentGPS™ Dashboards, which provide an easy-to-understand picture of how a student is performing by combining multiple streams of student data, such as grades, attendance, discipline, and standardized test scores.

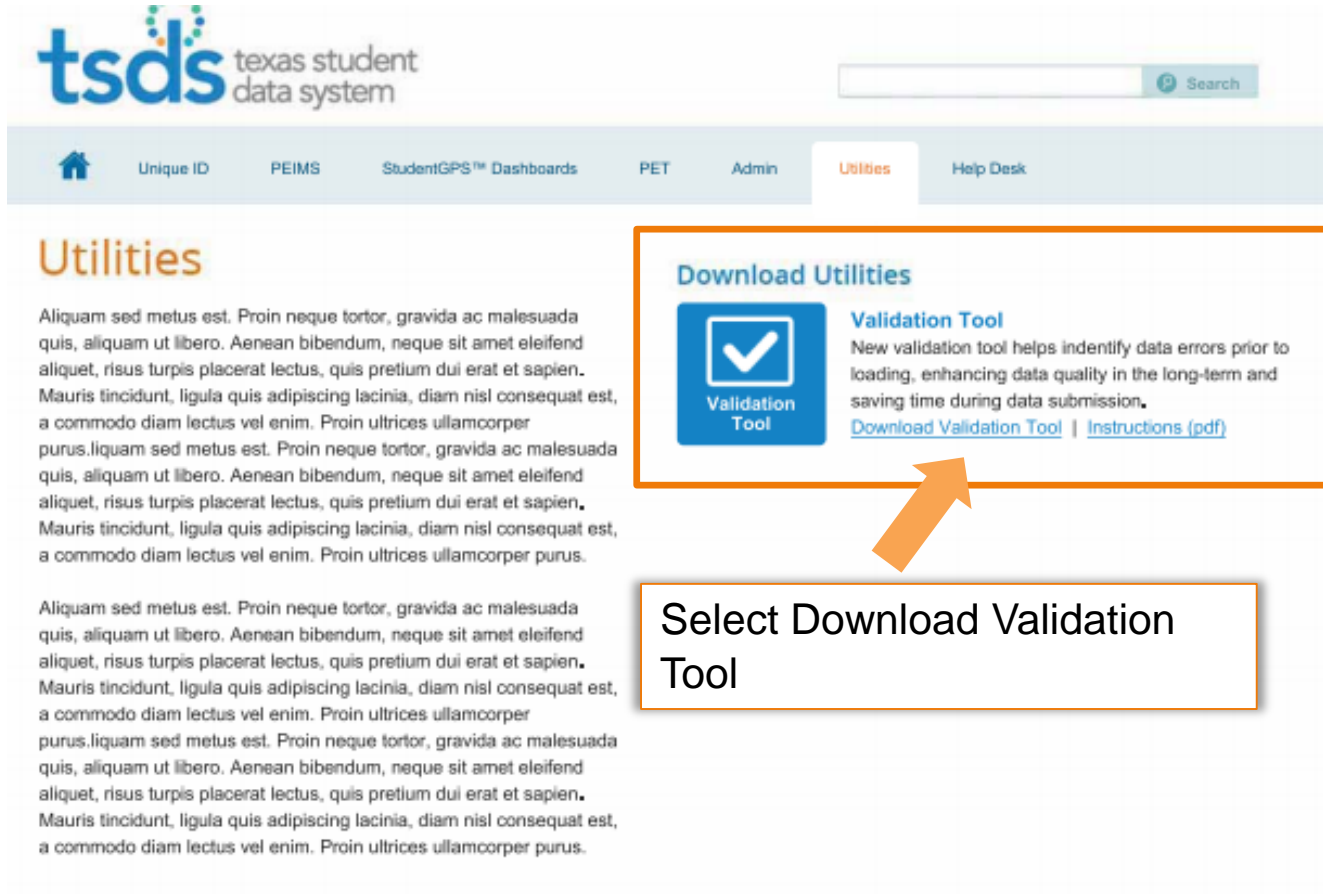
As a whole, TSDS represents a ground-breaking effort to reduce the burden on local education agencies and provide more value from the data collected.

**GET STARTED**

- Manage Unique IDs
- Manage Data Loads
- Promote Loaded Data
- Prepare/Finalize Data
- View Reports**

**My Messages** [View Older Messages](#)

System:	Message:	Date:	From:	Delete
Portal	<a href="#">System Maintenance 6/26/2013</a>	6/2/2013	System	<input type="checkbox"/>
PEIMS	<a href="#">MidYear Collection ready for review</a>	5/28/2013	System	<input type="checkbox"/>
Broadcast	<a href="#">New PEIMS training available</a>	5/14/2013	Petula Henderson	<input type="checkbox"/>
Broadcast	<a href="#">FSP data updated in PEIMS</a>	5/14/2013	Zebulon Jones	<input type="checkbox"/>
studentGPS™	<a href="#">New report added to dashboards</a>	5/1/2013	System	<input type="checkbox"/>
PET	<a href="#">New PET system in test</a>	4/26/2013	System	<input type="checkbox"/>




**Utilities**

Aliquam sed metus est. Proin neque tortor, gravida ac malesuada quis, aliquam ut libero. Aenean bibendum, neque sit amet eleifend aliquet, risus turpis placerat lectus, quis pretium dui erat et sapien. Mauris tincidunt, ligula quis adipiscing lacinia, diam nisi consequat est, a commodo diam lectus vel enim. Proin ultrices ullamcorper purus. liquam sed metus est. Proin neque tortor, gravida ac malesuada quis, aliquam ut libero. Aenean bibendum, neque sit amet eleifend aliquet, risus turpis placerat lectus, quis pretium dui erat et sapien. Mauris tincidunt, ligula quis adipiscing lacinia, diam nisi consequat est, a commodo diam lectus vel enim. Proin ultrices ullamcorper purus.

Aliquam sed metus est. Proin neque tortor, gravida ac malesuada quis, aliquam ut libero. Aenean bibendum, neque sit amet eleifend aliquet, risus turpis placerat lectus, quis pretium dui erat et sapien. Mauris tincidunt, ligula quis adipiscing lacinia, diam nisi consequat est, a commodo diam lectus vel enim. Proin ultrices ullamcorper purus. liquam sed metus est. Proin neque tortor, gravida ac malesuada quis, aliquam ut libero. Aenean bibendum, neque sit amet eleifend aliquet, risus turpis placerat lectus, quis pretium dui erat et sapien. Mauris tincidunt, ligula quis adipiscing lacinia, diam nisi consequat est, a commodo diam lectus vel enim. Proin ultrices ullamcorper purus.

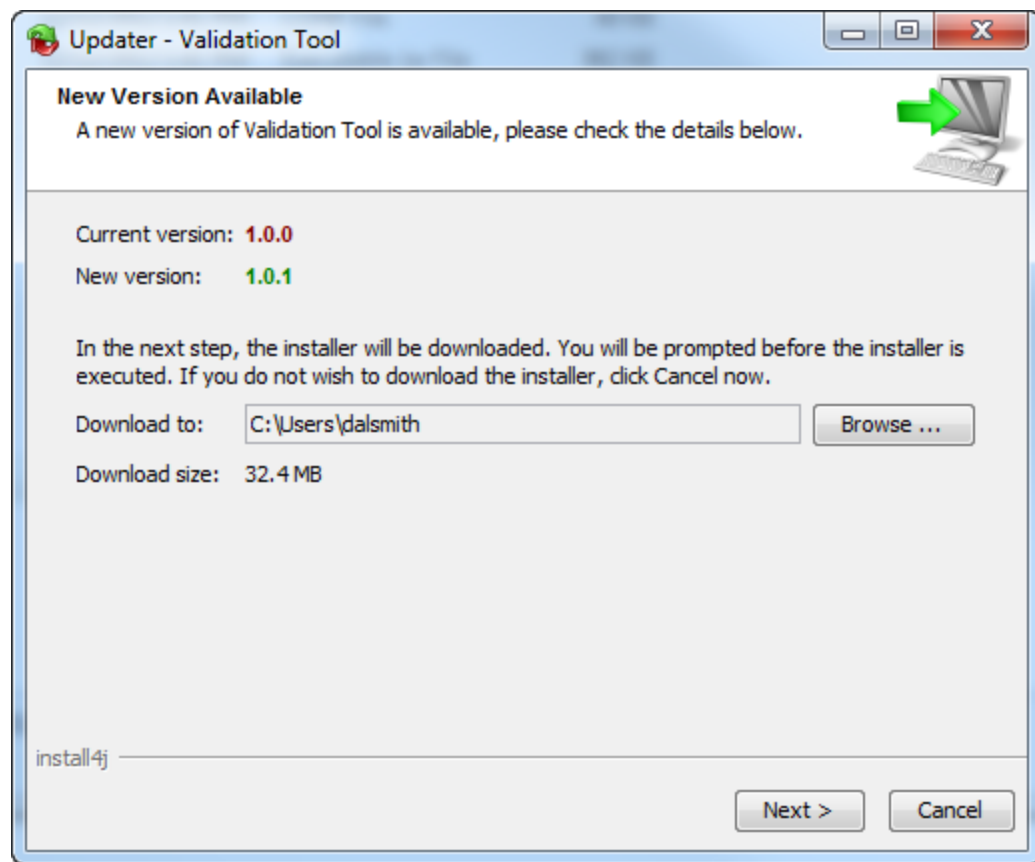
**Download Utilities**

 **Validation Tool**

New validation tool helps identify data errors prior to loading, enhancing data quality in the long-term and saving time during data submission.

[Download Validation Tool](#) | [Instructions \(pdf\)](#)

**Select Download Validation Tool**

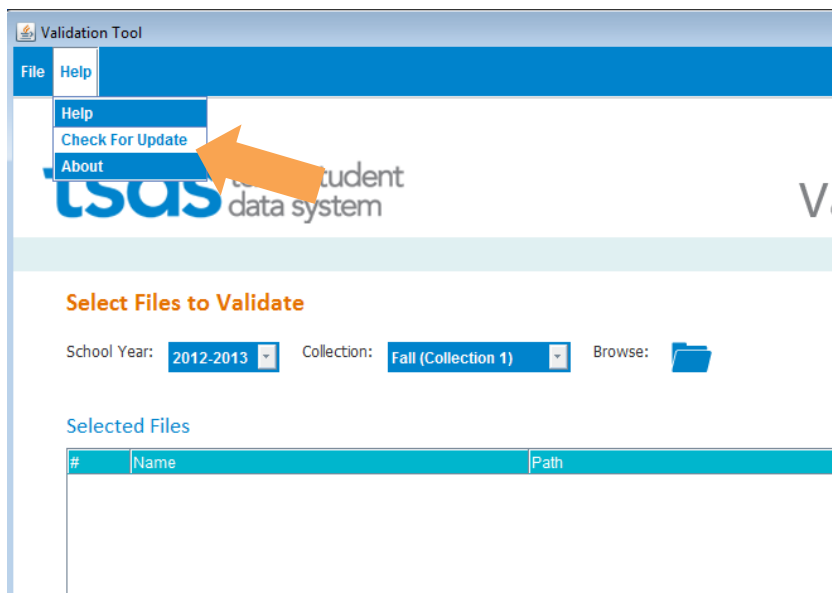


- The user will see a screen when the application launches if a newer version of the TSDS Client-Side Validation Tool is available
- The user then elects to update the tool



# Manual Version Updates


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- The user can also manually check for updates by clicking on Help
- The Check for Update link runs the user through the update wizard

Validation Tool


File Help



texas student data system



## Validation Tool

### Select Files to Validate


School Year: 2012-2013 Collection: Fall (Collection 1) Browse: 

#### Selected Files

#	Name	Path	Size	Status
---	------	------	------	--------



Process Files Details Clear All Remove File



Open TSDS

☐ This is the Home page for File Selection




# tsds Select Collection

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Validation Tool

File Help

 **tsds** texas student data system

Validation Tool


Select Files to Validate

School Year: 

2012-2013


 Collection: 



Fall (Collection 1)

 Browse: 

Selected Files

#	Name	Size	Status
---	------	------	--------




  


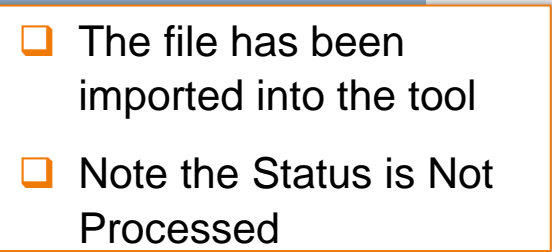
Process Files

Details

Clear All

Remove File

 **tsds** Open TSDS



School Year: **2012-2013** Collection: **Dashboard** Browse:

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\P...	1.1 MB	Not Processed






# Multiple Files Imported


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Validation Tool

File Help



 **tsds** texas student data system

### Select Files to Validate

School Year: 2012-2013 Collection: Dashboard Browse: 

Selected Files

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	1.1 MB	Not Processed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	14.3 MB	Not Processed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	804 KB	Not Processed

Process Files Details Clear All Remove File


☐ Note that all three files have now been imported

- ☐ The user can also select additional files to process
- ☐ Hold Ctrl key down to multi-select Files
- ☐ The tool can process multiple files, but not zip files




d proprietary.

Validation Tool
File Help




texas student data system

Select Files to Validate

School Year: 2012-2013
Collection: Dashboard
Browse: 

Selected Files

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	1.1 MB	Not Processed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	14.3 MB	Not Processed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	804 KB	Not Processed

- ☐ The user can opt to prioritize the order of file validation by moving it up or down on the list
- ☐ The user can also remove a file from the list

Process Files

Details

Clear All


Remove File

Validation Tool

File Help



**tsds** texas student data system

**Select Files to Validate**

School Year: 2012-2013 Collection: Dashboard Browse: 

**Selected Files**

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	1.1 MB	Not Processed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	14.3 MB	Not Processed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	804 KB	Not Processed

- ☐ The user selects the XML Interchange files to be processed
- ☐ Then the user clicks Process to begin

**Process Files****Details****Clear All****Remove File**



# Monitoring Progress

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Validation Tool

File Help

tsds

Progress

Validating Files ...

Cancel

School Year: 2012-2013 Collection: Dashboard Browse:

Selected Files

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\I...	804 KB	Not Processed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\I...	1.1 MB	Not Processed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\I...	14.3 MB	Not Processed

The user will see a Progress bar as the XML Interchange Files are validating

Process Files

Details

Clear All

Remove File



1 proprietary.




# File Status: Passed

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Validation Tool

File Help





Validation Tool

Select Files to Validate

School Year: 2012-2013 Collection: Dashboard Browse: 

Selected Files

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\P...	804 KB	Passed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\P...	1.1 MB	Passed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\P...	14.3 MB	Passed



☐ Note under Status that all the files Passed

Process Files

Details

Clear All

Remove File



© proprietary.


Validation Tool

File Help

tsds texas student data system



Validation Tool

Select Files to Validate

School Year: 2012-2013 Collection: Dashboard Browse: 

Selected Files

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\P...	804 KB	Passed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\P...	1.1 MB	Passed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\P...	14.3 MB	Passed

☐ The user can select a file and opt to view Details

Process Files

Details

Clear All

Remove File






# No Validation Errors


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Validation Tool

File Help

 **tsds** texas student data system

Select Files to Validate

School Year: 2012-2013 Collection: Dashboard Browse: 

Selected Files

#	Name	Path	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNich...	ssed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNich...	ssed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNich...	ssed

Process Files


Details

Clear All

Remove File

This file has no validation errors

Message

 The File has No Validation Errors!

OK

1 proprietary.

Validation Tool
File Help

tsds
texas student data system

Validation Tool

Select Files to Validate

School Year: 2012-2013 Collection: Dashboard Browse:

Selected Files

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	804 KB	Passed
2	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	1.1 MB	Passed
3	227950_000_2013TSDS_201310271015_Interchange...	C:\Users\LMcNicholas\Documents\Texas\IP...	14.3 MB	Passed

Process Files
Details
Clear All
Remove File

☐ The user can also select Clear All to clean the queue



## Validation Process: Validations

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- The TSDS Client-Side Validation Tool confirms that the XML Interchange Files adhere to the collection specific validation package rules
- If the file passes the collection specific validation package rules, the TSDS Client-Side Validation Tool confirms that the data in the interchange file complies with the TEDS Section 3, TEDS Section 4 and some of the TEDS Section 5 checks



# Troubleshooting



# Naming Convention Rules

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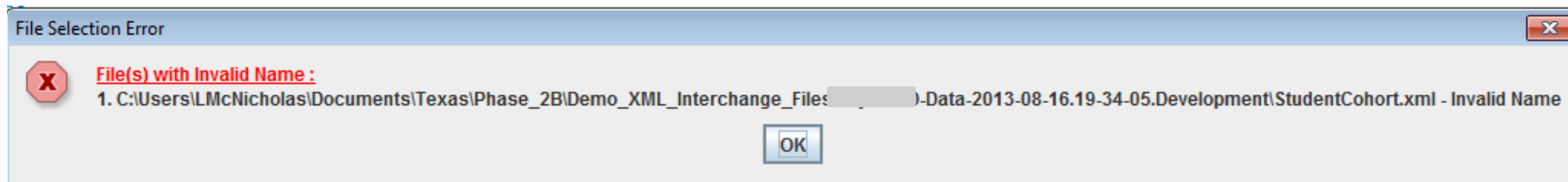
- The XML Interchange File must meet the TEDS naming convention
- If the file fails the naming conventions, the system displays an error prompt and the file is removed from the list.
  - ▣ The user can browse again and upload another file or rename the file



## Invalid Name Error

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- ☐ This file does not meet the required naming convention
- ☐ The TSDS Client-Side Validation Tool will not accept the file





# Naming Convention Elements

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- For each interchange file submitted to the Operational Data Store (ODS), the system must identify the correct organization and data collection in order to process the file correctly.
- There must be an underscore (\_) between each element in the file name.

Description	District Code	-	Campus ID	-	Collection Code	-	Timestamp	-	Interchange
Position	1-6	7	8-10	11	12-20	21	22-33	34	35*
Length	6		3		9		12		*



# Naming Convention Definitions

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Title Element	Description
District Code	The District (LEA) Code for which the data is being uploaded
Campus ID	The Campus ID if it is campus data otherwise “000” for district data
Collection Code	A character string that identifies the data collection. The first four characters of the Collection Code will be the ending year of the school year. The next four characters of the collection code will indicate the type of the data submitted.





## Naming Convention Definitions II

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Title Element	Description
Collection Code	<p>These values currently are:</p> <ul style="list-style-type: none"><li>• “FALL1” which represents the PEIMS Fall First Submission</li><li>• “FALL2” which represents the PEIMS Fall Resubmission</li><li>• “FALL3” which represents the PEIMS Fall Working Collection</li><li>• “MDYR1” which represents the PEIMS Mid-Year First Submission</li><li>• “MDYR2” which represents the PEIMS Mid-Year Resubmission</li><li>• “MDYR3” which represents the PEIMS Mid-Year Working Collection</li><li>• “SUMR1” which represents the PEIMS Summer First Submission</li><li>• “SUMR2” which represents the PEIMS Summer Resubmission</li><li>• “SUMR3” which represents the PEIMS Summer Working Collection</li><li>• “EXYR1” which represents the PEIMS Extended-Year First Submission</li><li>• “EXYR2” which represents the PEIMS Extended-Year Resubmission</li><li>• “EXYR3” which represents the PEIMS Extended-Year Working Collection</li><li>• “TSDS” which represents data submissions including studentGPS™ data</li></ul>



# Naming Convention Definitions III

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Title Element	Description
Timestamp	The timestamp is a date in YYYYMMDDHHMM format (e.g. 201406021015). The Timestamp shall be a system generated value at the time the data is extracted.
Interchange	The interchange is the name of the interchange being submitted



# Naming Convention Samples

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- The correct naming convention follows this format:

## Samples

### Definition

2013-2014 Fall First Submission Collection Staff Association Interchange for Region XIII

### Name

227950\_000\_2014FALL1\_201310271015\_InterchangeStaffAssociationExtension.xml

### Definition

2013-2014 Fall First Submission Collection Student Interchange for Austin ISD

### Name

227901\_000\_2014FALL1\_201310271015\_InterchangeStudentExtension.xml

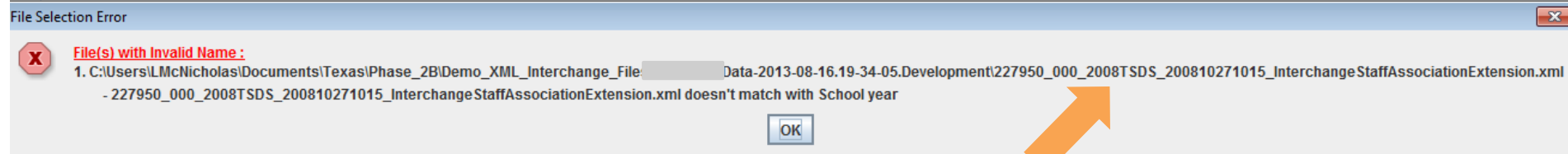
- In addition to the naming convention requirements, users need to make sure the XML Interchange Files are being uploaded properly
  - ▣ The XML Interchange Files need to be uploaded under the correct School Year as reflected in the file name
  - ▣ The XML Interchange Files need to be uploaded via the correct Collection
    - If the Interchange Schema is not included in the collection, the tool will reject the file
  - ▣ The TSDS Client-Side Validation tool only accepts files with a .xml extension
    - Zip files cannot be processed



## Invalid School Year Error

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- ☐ This file does not meet the required naming convention
- ☐ Specifically the School Year in the name doesn't match





## Invalid Collection Error

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- ☐ This file was submitted through the Dashboard Collection
- ☐ The file name indicates this is part of the Fall Collection

File Selection Error



File(s) with Invalid Name :

1. C:\Users\LMcNicholas\Documents\Validation Tool XML Files\061902\_000\_2013FALL\_201302201015\_InterchangeEducationOrganizationExtension.xml  
- 061902\_000\_2013FALL\_201302201015\_InterchangeEducationOrganizationExtension.xml doesn't match with collection

OK



## Troubleshooting: Data Issues

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- If the XML Interchange Files fail validation, then the data submission did not meet the requirements of TEDS Section 3 (XSD Validations), TEDS Section 4 (Description of Codes) or TEDS Section 5 (Business Rules & Validations)



## File Status: Failed

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Validation Tool

File Help

tsds texas student data system

Select Files to Validate

School Year: 2012-2013 Collection: Select Browse:

Selected Files

#	Name	Path	Size	Status
1	227950_000_2013TSDS_201311271015_Interchange...	C:\Users\LMcNicholas\Documents\TexasIP...	2 KB	Failed

- ☐ This file failed validation
- ☐ Note the Failed Status
- ☐ Users can opt to View Details

Process Files

Details

Clear All

Remove File



1d proprietary.



## Detail Errors

Stopped at 3 error(s).

**File Name:** 227950\_000\_2013TSDS\_201311271015\_InterchangeStudentAttendanceExtension.xml

**Organization:** 227950

**School Year:** 2012-2013

**Collection Period:** Select

**Error Count:** 3

**Processing Time:** 0.106sec

- ☐ Note the File Details
- ☐ Users can Filter by Error Type

Filter Errors

All

All

Fatal

Warning

Special Warning

Line	Error Message
12	cvc-pattern-valid: Value '948547AB76' is not facet-valid with respect to pattern '[\d]{1,10}' for type 'Uniqueness'
34	cvc-pattern-valid: Value '82686212E0' is not facet-valid with respect to pattern '[\d]{1,10}' for type 'Uniqueness'
9	cvc-minLength-valid: Value " with length = '0' is not facet-valid with respect to minLength '1' for type 'Educational'

- There are three categories of errors (edits).
  - The first category produces a fatal error. Neither an LEA nor an ESC can mark “complete” a file with fatal error(s). A file with a fatal error(s) will not be accepted by TEA for a PEIMS collection and must be corrected.
  - The second type of edit produces a special warning error. A special warning error indicates a discrepancy in the data that must be scrutinized carefully. In unusual situations, the data are correct.
  - The third category of edit produces a warning error, which indicates a possible error or inconsistency.



## Record Level Error Message

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1	Line	Error Message	Error Type
2	9	cvc-minLength-valid: Value " with length = '0' is not facet-valid with respect to minLength '1' for type 'EducationalEnvironmentType'. cvc-type.3.1.3: The value " of element 'EducationalEnvironment' is not valid.	fatal
3	12	cvc-pattern-valid: Value '948547AB76' is not facet-valid with respect to pattern '[\d]{1,10}' for type 'UniqueStatelIdentifier'. cvc-type.3.1.3: The value '948547AB76' of element 'StudentUniqueStateld' is not valid.	fatal
4	34	cvc-pattern-valid: Value '82686212E0' is not facet-valid with respect to pattern '[\d]{1,10}' for type 'UniqueStatelIdentifier'. cvc-type.3.1.3: The value '82686212E0' of element 'StudentUniqueStateld' is not valid.	fatal
5			
6			

Line	Error Message	Error Type
9	<p>cvc-minLength-valid: Value " with length = '0' is not facet-valid with respect to minLength '1' for type 'EducationalEnvironmentType'.</p> <p>cvc-type.3.1.3: The value " of element 'EducationalEnvironment' is not valid.</p>	fatal

- ❑ In this case, the value entered for EducationEnvironmentType has to be at least one character
- ❑ There was no value entered, hence the length is interpreted as “0” and doesn’t meet the minimum requirement

Line	Error Message	Error Type
12	<p>cvc-pattern-valid: Value '948547AB76' is not facet-valid with respect to pattern '[\d]{1,10}' for type 'UniqueStateIdentifier'.</p> <p>cvc-type.3.1.3: The value '948547AB76' of element 'StudentUniqueStateId' is not valid.</p>	fatal

- ❑ In this case, the value entered for StudentUnqiueStateId is expected to be made up of values between {1,10}
- ❑ Alpha characters “A and B” do not meet these requirements

Line	Error Message	Error Type
95	cvc-complex-type.2.4.a: Invalid content was found starting with element 'StudentReference'. One of '{"http://www.tea.state.tx.us/tsds":AttendanceEventReason}' is expected.	fatal

- ❑ The sequence of data is incorrect, starting at line 95. The InterchangeStudentAttendanceExtension expects that AttendanceEventReason should be the following tag, not StudentReference
- ❑ Compare the samples on the following slide

```

</AttendanceEvent>
<AttendanceEvent>
  <EventDate>2013-02-04</EventDate>
  <AttendanceEventType>Section Attendance</AttendanceEventType>
  <AttendanceEventCategory>Unexcused Absence</AttendanceEventCategory>
  <StudentReference>
    <StudentIdentity>
      <StudentUniqueStateId>6243157563</StudentUniqueStateId>
    </StudentIdentity>
  </StudentReference>
  <SectionReference>

```

- ❑ Tags are missing from this sequence and the data cannot be processed

- ❑ This is the correct sequence
- ❑ TEDS Section 7 provides Data Samples for each Interchange Schema

```

-->
<InterchangeStudentAttendance xmlns="http://www.tea.state.tx.us/tsds"
  xsi:schemaLocation="http://www.tea.state.tx.us/tsds InterchangeStudentAttendance.xsd">
  <AttendanceEvent>
    <EventDate>2013-10-01</EventDate>
    <AttendanceEventType>Section Attendance</AttendanceEventType>
    <AttendanceEventCategory>Early departure</AttendanceEventCategory>
    <AttendanceEventReason>Doctor Appointment</AttendanceEventReason>
    <EducationalEnvironment>Classroom</EducationalEnvironment>
  </AttendanceEvent>
  <StudentReference>
    <StudentIdentity>
      <StudentUniqueStateId>0123456789</StudentUniqueStateId>
    </StudentIdentity>
  </StudentReference>

```



## Data and File Issue Summary

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- As a general rule, if it is a *data* issue, the correction needs to be made in the source system and XML Interchange Files need to be resubmitted
- If it is an issue with the file naming convention or architecture, chances are there is an issue with the source system extract and the source system vendor may have to make the correction





## Wrap Up and Questions

## Today we talked about:

- ❑ TEDS Standards
- ❑ Validating the XML Interchange Files using the TSDS Client-Side Validation Tool.
- ❑ Downloading and installing the tool
- ❑ Running and reviewing data error reports
- ❑ Troubleshooting the data error reports and the escalation process



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MORE DATA



IMPROVED ID



NEW SAVINGS



EXPANDED REPORTS



BETTER PLANNING

Search



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# Questions?

[www.TexasStudentDataSystem.org](http://www.TexasStudentDataSystem.org)