RevGen Partners

Teacher Student Data Link Data Requirements

Data requirements and business rules for the creation of the master Teacher to Student to Content Area to Assessment link

1/21/2013

Contents

Overview

The purpose of this document is to describe the data requirements and business rules used to create the Teacher Student Data Link (TSDL) in the ODS data warehouse for TSDL reporting purposes, as well as for reporting purposes of any other efforts that need to use Teacher to Student linked data. The document is broken into three sections (1) Data Requirements – Linked Data, (2) Data Requirements – Unlinked Courses, and (3) Data Requirements – Unlinked Student Assessments, which collectively provide a full picture of all course and assessment data relevant to teachers and students.

Document Scope

This document outlines the data requirements and business rules applied to that data that will enable the creation of the Teacher Student Data Link (TSDL). This document does not include technical information on where the data will ultimately be located.

General Data and Link Requirements

This section outlines general requirements that are relevant for all three components of the TSDL master link (1) Linked Data, (2) Unlinked Courses, and (3) Unlinked Student Assessments.

Historical Data

Data Provided Prior to the *2010-2011* School Year

Scheduling practices prior to the 2010-2011 school year did not allow for tracking interactions between teachers and students due to the inconsistent processes, which would likely result in numerous inaccuracies (and interactions that took place between students and teachers that are not reflected). In addition, content areas were not in use prior to the 2010-2011 school year so it is not possible to create a link between teachers to students to course to assessments.

Data should only be populated into the TSDL linked table starting with the 2010-2011 school year. However, data from the 2010-11 school year and prior may not be accurate as scheduling practices did not allow for consistent teacher to course to student interaction capturing, especially with Special Education (SPED), Gifted and Talented (GT) and other intervention teachers who were largely unscheduled prior to this time.

 Also, the content area fields used to link courses to assessments were not in use, and if any assessments or courses are mapped to content area codes for years prior to 2010-2011, the content area codes should be removed.

Data Provided between the 2010-2011 and 2011-2012 School Year

Courses and content areas in the TSDL data during in the 2010-2011 and 2011-2012 school year were mapping to the course codes and content areas established by DPS. By 2013-2014 school year, the Colorado Education Department (CDE) is requiring each school district to report teacher to student to assessments data to the state. Due to this requirement DPS remapped all the course codes and content

areas over to the State Standard Course and Content Area Codes for the 2012-2013 school year and beyond.

Subsequently, all TSDL linked data from the 2011-2012 school year and prior will use a different content area set then the content area set from 2012-2013 and beyond. Any attempt to compare data or conduct trending analysis from both before and after the content area changes will need to take into account the modification in content areas.

Data Repository

Data Retention

Data should be kept in the TSDL master link database, Operational Data Store (ODS) until the termination of the database, or for the maximum allowable time that DoTS databases will allow a historical records to be kept.

Data Load Frequency

Frequency of data loads to the particular tables should follow the current ODS data load schedules.

Data Included

Since many consumers may utilize the TSDL master data, the objective is to provide only the key fields necessary for each data object to create the unique master linked records, and any other fields from these objects can be included at time of extraction, as required. If additional data elements are needed from external sources for the particular purposes of the consumer of the TSDL master data, that consumer may join those external elements to this data source to meet their needs.

Part 1) Data Requirements – Linked Data

The purpose of this component of the TSDL master link is to show all student assessment results that link successfully to course sections (and the associated students and teachers assigned to those course sections). In order to create this component of the TSDL master link the following data objects listed below must be utilized:

- School

- Teacher

- Course / Course Section

    o   Course to Content Area link

- Student

- Student Assessment

    o   Assessment to Content Area link

Data Criteria

TSDL data will link appropriately when the following criteria are met:

1. A student is assigned to a course section with the same content area as the assessment anytime during the course of the school year, and
2. The student assessment is taken during the school year in which the course section took place, and
3. The teacher is assigned to the course section at the time the student is enrolled in the course section

School Data

Rules

1. All schools should be brought into the linked table as long as:
   a. The school has scheduled course sections from the 2010-2011 school year or after

School Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available?**
schoolNumber	Unique identifier for the school	Infinite Campus ||	Yes
schoolName	Common name for the school	Infinite Campus ||	Yes
principalGroup	Regional group that the school is associated with (i.e. Elementary Region 4, etc.)	Infinite Campus ||	Yes
School Type	Type of school (E, M, H, K-8, K-12, 6-12)	Infinite Campus ||	Yes

Teacher Data

Rules

1. All teachers should be brought into the linked table as long as:
   a. The teacher is assigned to a course section in the school year 2010-2011 or after
2. All teacher data should be current as of the date of the student assessment result (so that it is possible to see the details of the teacher at the time the student assessment result was recorded)

Teacher Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available?**
DPS_ID	Unique identifier for teachers	Lawson ||	Yes
First Name	Personal Identifier	Lawson ||	Yes
Last Name	Personal Identifier	Lawson ||	Yes
Years of Service	Shows how long the teacher has been an educator in the district	Lawson ||	Validate
Years Teaching	Shows how long the teacher has been an educator both within and outside the district	Lawson ||	Validate
License Number	Shows the License # for the teacher, which indicates they are valid to teach	Lawson ||	Yes
License Date Acquired	Indicates when the teacher received his/her license	Lawson ||	Yes
License Renewal Date	Indicates when the teacher license needs to be renewed	Lawson ||	Yes
License Endorsement(s)	Indicates what specific subjects, if any, the teacher is licensed in	Lawson ||	Yes
ProComp Yes/No	Identifies if the teacher has opted into ProComp	Lawson ||	Yes

Course / Course Section Data

Rules

1. All course/course section data should be brought into the linked table as long as:
    a. The school year is set to 2010-2011 or after, and
    b. The course section is assigned to both student(s) and a teacher, including Alt schedules
    c. The course section is assigned to the current content areas established for the school year

Course Section Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available**

Course Number	Unique identifier for the course	Infinite Campus ||	Yes
Course Name	Common name for the course	Infinite Campus ||	Yes
Section Number	Shows what section a course appears under in the students roster	Infinite Campus ||	Yes
Term Code	Code identifying what term the course is taking place during	Infinite Campus ||	Yes
Teacher DPS_ID	Unique identifier for teachers	Infinite Campus ||	Yes
Teacher Start Date	Start date that teacher was assigned to the course section	Infinite Campus ||	Yes
Teacher End Date	End date that teacher was assigned to the course section	Infinite Campus ||	Yes
Student DPS_ID	Unique identifier for students	Infinite Campus ||	Yes
Student Start Date	Start date that student was assigned to the course section	Infinite Campus ||	Yes
Student End Date	Start date that student was assigned to the course section	Infinite Campus ||	Yes
Course Catalog ID	Unique identifier for each course catalog (one is created for Elementary, Middle, High School and all charters)	Infinite Campus ||	Yes
Course Catalog Year	Identifies what year the course is taking place during	Infinite Campus ||	Yes
Content Area Code 1	Shows the content area associated with the course being taught (used to link the assessments to the courses)	Infinite Campus ||	Yes
Content Area Code 2	Shows the content area associated with the course being taught (used to link the assessments to the courses)	Infinite Campus ||	Yes
Content Area Code 3	Shows the content area associated with the course being taught (used to link the assessments to the courses)	Infinite Campus ||	Yes
State Course Code	The CDE "State Course Codes" and the course names are used to	Infinite Campus ||	Yes

	determine the subject matter of the course		
Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate
Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate
Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate
Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate
Active	Identifies whether or not the course should be used (1=yes)	Infinite Campus ||	Validate
Transcript Flag	Identifies whether or not the course appears on transcripts (1=yes)	Infinite Campus ||	Validate
GPA Weight	Shows what weight this course has when calculating GPA	Infinite Campus ||	Validate
Credit Type	Shows what type of credit students will get towards their on track to graduate requirements	Infinite Campus ||	Validate
CusID1	Numeric identifier for the Credit Type field	Infinite Campus ||	Validate
Level	Shows whether the course is a traditional course or an honors course (T=traditional; H=honors)	Infinite Campus ||	Validate
CusIC2	Numeric identifier for the Level field	Infinite Campus ||	Validate
Attendance Flag	Shows whether or not the course is marked for attendance	Infinite Campus ||	Validate

Student Data

Rules

1. All students should be brought into the linked table as long as:

a. The student is assigned to a course section in the school year 2010-2011 or after
2. All student data should be current as of the date of the student assessment result (so that it is possible to see the details of the student at the time the student assessment result was recorded)

Student Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available**
DPS_ID	Unique identifier for students	Infinite Campus ||	Yes
First Name	Personal Identifier	Infinite Campus ||	Yes
Last Name	Personal Identifier	Infinite Campus ||	Yes
Grade Level	Grade Level Identifier	Infinite Campus ||	Yes
ELA Designation	Identifies if student is a English Language Learner	Infinite Campus ||	Validate
Free or Reduced Lunch	Identifies if student receives free or reduced lunch	Score Repository ||	State tests – Yes: Other tests - No

Assessment Data

Rules

1. All assessments should be brought into the linked table as long as:
    a. The school year is set to 2010-2011 or after, and
    b. The score status is set to "Complete" (this particular field does not need to be brought into the table), and
    c. The assessment is assigned to the current content areas establish for the school year
    d. The score can be associated to a Student DPS ID that appears Infinite Campus, and
    e. It doesn't meet the following limitations
        i. CELA Placement scores other than the overall
            1. TestCategory = Cela Place
            2. MeasureCode = Overall

Assessment Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available**

Admin ID	Identifier for the assessment record	Score Repository ||	Yes
Admin Date	Date the assessment was administered	Score Repository ||	Yes
Test ID	Number identifier for the TestName field	Score Repository ||	Yes
Booklet ID	Used to avoid duplication in test results if a student receives test results more than once for any single test in a day	Score Repository ||	Yes
TestName	Common Name for the assessment	Score Repository ||	Yes
TestCategory	Used to categorize assessments	Score Repository ||	Yes
MeasureName	Identifies what body of knowledge the assessment is testing (i.e. Math, Plane Geometry,etc.)	Score Repository ||	Yes
Measure ID	Number identifier for the MeasureName	Score Repository ||	Yes
MeasureCode	This appears to show the primary subject associated with the assessment.	Score Repository ||	Yes
Student Number	Unique identifier for students (should match to the students DPS_ID)	Score Repository ||	Yes
School Number	Unique identifier for the school	Infinite Campus ||	Yes
Subject Area Code	Content Area for the assessment (used to link the assessments to the courses) • *Note this field currently exists in the Score Repository in the scoredata_Tests_SubjectAreas table and is identified through the combination of the Test ID, School Year and Measure ID*	Score Repository ||	Yes
Semester	Shows what period of the year the particular assessment is relevant for (typically a test can be relevant for spring, fall, or another period of time)	Score Repository ||	Validate
School Year	Shows what year the assessment was conducted during	Infinite Campus ||	Yes
Assessment Score Information	Assessment scores (each is relevant for a different test)		Varies

The following score fields may all be relevant: • RS (raw score) • SS (scale score) • NP (national percentile, CSAP uses as growth percentile) • PROFLVL (proficiency level) • ZSCORE (scores deviation from the population mean) • Sar_Include (accountability flag) • CBNP (College board national percentile) • STAR_INSTRUCTIONAL_READING_LVL (instructional reading level) • STAR_ESTIMATED_ORF (oral reading fluency) • STAR_SEL_LiteracyClass (students literacy development level) • Battery (shows which round of Course Tests are being taken) • Did_Not_Test		

Part 2) Data Requirements – Unlinked Courses

The purpose of this component of the TSDL master link is to show all course sections (and the associated students and teachers assigned to those course sections) that do not link to any student assessment records. In order to create this component of the TSDL master link the following data objects listed below must be utilized:

- School

- Teacher

- Course / Course Section

- Student

Data Criteria

Unlinked course section data will appear in this component of the data source when it meets the following criteria:
1. The student is assigned to a teacher in a course section, and
2. Does not have any student assessment results that have the same content area as the course section for the school year in which the assessment was taken

School Data

Rules

1. All schools should be brought into the linked table as long as:
   a. The school has scheduled course sections from the 2010-2011 school year or after

School Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available?**
schoolNumber	Unique identifier for the school	Infinite Campus ||	Yes
schoolName	Common name for the school	Infinite Campus ||	Yes
principalGroup	Regional group that the school is associated with (i.e. Elementary Region 4, etc.)	Infinite Campus ||	Yes
School Type	Type of school (E, M, H, K-8, K-12, 6-12)	Infinite Campus ||	Yes

Teacher Data

Rules

1. All teachers should be brought into the table as long as:
   a. The teacher is assigned to a course section in the school year 2010-2011 or after
2. All teacher data should be accurate as of the start date of the course section

Teacher Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available?**
DPS_ID	Unique identifier for teachers	Lawson ||	Yes

First Name	Personal Identifier	Lawson ||	Yes
Last Name	Personal Identifier	Lawson ||	Yes
Years of Service	Shows how long the teacher has been an educator in the district	Lawson ||	Validate
Years Teaching	Shows how long the teacher has been an educator both within and outside the district	Lawson ||	Validate
License Number	Shows the License # for the teacher, which indicates they are valid to teach	Lawson ||	Yes
License Date Acquired	Indicates when the teacher received his/her license	Lawson ||	Yes
License Renewal Date	Indicates when the teacher license needs to be renewed	Lawson ||	Yes
License Endorsement(s)	Indicates what specific subjects, if any, the teacher is licensed in	Lawson ||	Yes
ProComp Yes/No	Identifies if the teacher has opted into ProComp	Lawson ||	Yes

Course / Course Section Data

Rules

1. All course/course section data should be brought into the linked table as long as:
   a. The school year is set to 2010-2011 or after, and
   b. The course section is assigned to both student(s) and a teacher, including Alt schedules
   c. The course section is assigned to the current content areas establish for the school year

Course Section Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available**
Course Number	Unique identifier for the course	Infinite Campus ||	Yes
Course Name	Common name for the course	Infinite Campus ||	Yes
Section Number	Shows what section a course appears under in the students roster	Infinite Campus ||	Yes

Term Code	Code identifying what term the course is taking place during	Infinite Campus ||	Yes
Teacher DPS_ID	Unique identifier for teachers	Infinite Campus ||	Yes
Teacher Start Date	Start date that teacher was assigned to the course section	Infinite Campus ||	Yes
Teacher End Date	End date that teacher was assigned to the course section	Infinite Campus ||	Yes
Student DPS_ID	Unique identifier for students	Infinite Campus ||	Yes
Student Start Date	Start date that student was assigned to the course section	Infinite Campus ||	Yes
Student End Date	Start date that student was assigned to the course section	Infinite Campus ||	Yes
Course Catalog ID	Unique identifier for each course catalog (one is created for Elementary, Middle, High School and all charters)	Infinite Campus ||	Yes
Course Catalog Year	Identifies what year the course is taking place during	Infinite Campus ||	Yes
Content Area Code 1	Shows the content area associated with the course being taught (used to link the assessments to the courses)	Infinite Campus ||	Yes
Content Area Code 2	Shows the content area associated with the course being taught (used to link the assessments to the courses)	Infinite Campus ||	Yes
Content Area Code 3	Shows the content area associated with the course being taught (used to link the assessments to the courses)	Infinite Campus ||	Yes
State Course Code	The CDE "State Course Codes" and the course names are used to determine the subject matter of the course	Infinite Campus ||	Yes
Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate

Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate
Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate
Alt State Course Code	Used to identify additional CDE State Course Codes that are appropriate for the course	Infinite Campus ||	Validate
Active	Identifies whether or not the course should be used (1=yes)	Infinite Campus ||	Validate
Transcript Flag	Identifies whether or not the course appears on transcripts (1=yes)	Infinite Campus ||	Validate
GPA Weight	Shows what weight this course has when calculating GPA	Infinite Campus ||	Validate
Credit Type	Shows what type of credit students will get towards their on track to graduate requirements	Infinite Campus ||	Validate
CusID1	Numeric identifier for the Credit Type field	Infinite Campus ||	Validate
Level	Shows whether the course is a traditional course or an honors course (T=traditional; H=honors)	Infinite Campus ||	Validate
CusIC2	Numeric identifier for the Level field	Infinite Campus ||	Validate
Attendance Flag	Shows whether or not the course is marked for attendance	Infinite Campus ||	Validate

Student Data

Rules

1. All students should be brought into the table as long as:
   a. The student is assigned to a course section in the school year 2010-2011 or after
2. All student data should be accurate as of the start date of the course section

Student Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available**
DPS_ID	Unique identifier for students	Infinite Campus ||	Yes
First Name	Personal Identifier	Infinite Campus ||	Yes
Last Name	Personal Identifier	Infinite Campus ||	Yes
Grade Level	Grade Level Identifier	Infinite Campus ||	Yes
ELA Designation	Identifies if student is a English Language Learner	Infinite Campus ||	Validate
Free or Reduced Lunch	Identifies if student receives free or reduced lunch	Score Repository ||	No

Part 3) Data Requirements – Unlinked Student Assessments

The purpose of this component of the TSDL master link is to show all student assessment results that do not link successfully to course sections. In order to create this component of the TSDL master link the following data objects listed below must be utilized:

- School
- Student
- Student Assessment

Data Criteria

Unlinked student assessment data will appear in this component of the data source when it meets the following criteria:

1. The student assessment records do not have the same content area as the course sections that student was assigned to during the school year in which the student assessment was taken

School Data

Rules

1. All schools should be brought into the table

School Data

Field Name	Field Description	Data Source || Source Field Name	Available?
schoolNumber	Unique identifier for the school	Score Repository ||	Yes
schoolName	Common name for the school	Score Repository ||	Validate
principalGroup	Regional group that the school is associated with (i.e. Elementary Region 4, etc.)	Score Repository ||	Validate
School Type	Type of school (E, M, H, K-8, K-12, 6-12)	Score Repository ||	Validate

Student Data

Rules

1. All students should be brought into the table
2. All student data should be current as of the date of the student assessment result (so that it is possible to see the details of the student at the time the student assessment result was recorded)

Student Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available**
DPS_ID	Unique identifier for students	Score Repository ||	Yes
First Name	Personal Identifier	Score Repository ||	Yes
Last Name	Personal Identifier	Score Repository ||	Yes
Grade Level	Grade Level Identifier	Score Repository ||	Validate
ELA Designation	Identifies if student is a English Language Learner	Score Repository ||	Validate
Free or Reduced Lunch	Identifies if student receives free or reduced lunch	Score Repository ||	State tests, Yes: Other tests, No

Assessment Data

Data Source

Score Repository (passed into the ODS)

Rules

1. All assessments should be brought into the table as long as:
   a. The school year is set to 2010-2011 or after, and
   b. The score status is set to "Complete" (this particular field does not need to be brought into the table), and
   c. The score can be associated to a Student DPS ID that appears Infinite Campus, and
   d. It doesn't meet the following limitations
      i. CELA Placement scores other than the overall
         1. TestCategory = Cela Place
         2. MeasureCode = Overall

Assessment Data			
Field Name	**Field Description**	**Data Source || Source Field Name**	**Available**
Admin ID	Identifier for the assessment record	Score Repository ||	Yes
Admin Date	Date the assessment was administered	Score Repository ||	Yes
Test ID	Number identifier for the TestName field	Score Repository ||	Yes
Booklet ID	Used to avoid duplication in test results if a student receives test results more than once for any single test in a day	Score Repository ||	Yes
TestName	Common Name for the assessment	Score Repository ||	Yes
TestCategory	Used to categorize assessments	Score Repository ||	Yes
MeasureName	Identifies what body of knowledge the assessment is testing (i.e. Math, Plane Geometry,etc.)	Score Repository ||	Yes
Measure ID	Number identifier for the MeasureName	Score Repository ||	Yes
MeasureCode	This appears to show the primary subject associated with the assessment.	Score Repository ||	Yes

Student Number	Unique identifier for students (should match to the students DPS_ID)	Score Repository ||	Yes
School Number	Unique identifier for the school	Score Repository ||	Yes
Subject Area Code	Content Area for the assessment (used to link the assessments to the courses) • *Note this field currently exists in the Score Repository in the scoredata_Tests_SubjectAreas table and is identified through the combination of the Test ID, School Year and Measure ID*	Score Repository ||	Yes
Semester	Shows what period of the year the particular assessment is relevant for (typically a test can be relevant for spring, fall, or another period of time)	Score Repository ||	Validate
School Year	Shows what year the assessment was conducted during	Score Repository ||	Yes
Assessment Score Information *The following score fields may all be relevant:* • RS (raw score) • SS (scale score) • NP (national percentile, CSAP uses as growth percentile) • PROFLVL (proficiency level) • ZSCORE (scores deviation from the population mean) • Sar_Include (accountability flag) • CBNP (College board national percentile) • STAR_INSTRUCTIONAL_READING_LVL (instructional reading level) • STAR_ESTIMATED_ORF (oral reading fluency) • STAR_SEL_LiteracyClass (students literacy development level)	Assessment scores (each is relevant for a different test)		Varies

• Battery (shows which round of Course Tests are being taken) • Did_Not_Test			