

RELEASE NOTES: WHAT'S NEW IN THE CEDS VERSION 7 STANDARDS AND DATA MODELS

In version 7 there are 106 new data element definitions and 97 updated elements. In all, the standards contain 1,567 unique data element definitions. In addition, more than 50 elements have been added to new contexts within the CEDS Domain Entity Schema (DES) to reflect additional uses.

Version 7 spans P-20W (early learning through workforce), with significant improvements related to data vocabulary for

- credentials definition and assertions;
- competency frameworks;
- K12 special education data used locally for Individualized Education Programs (IEPs) and compliance;
- IPEDS postsecondary finance;
- reporting variables; and
- School Courses for the Exchange of Data (SCED) updates.

The latest release also includes various updates and clarifications in response to feedback from the CEDS community after the version 6 release.

Data Model Changes

Both the Domain Entity Schema (DES) and Normalized Data Schema (NDS) have been modified to reflect new elements and the application of existing elements to new use cases.

DES Changes

Significant changes to the **Domain Entity Schema** include the following:

- The Achievement category under the Assessments domain is now its own domain called “Credential.” The top level defines the credential itself, such as might be offered or awarded by an organization. The domain has a separate category for “Credential Award” with information about a credential conferred to or earned by a person. This change reflects the significant expansion of the standards for credentials and coordination with other standards organizations including the Credential Transparency Initiative, Open Badges, PESC, and IMS Global.
- The “Learning Standards” domain has been renamed “Competencies” with the categories “Competency Framework,” “Competency Framework Item,” and “Competency Framework Item Association” replacing “Learning Standard Document,” “Learning Standard Item,” and “Learning Standard Item Association.” This change reflects the expanded use of CEDS standards, the emergence of “competencies” as the preferred term across P-20W sectors (“learning standards” is a K12-centric term), and coordination with other emerging standards.

- A “Implementation Variables” domain has been added. This domain contains elements related to implementation, such as “Report Date,” that are neither the unit-level data elements defined elsewhere in CEDS nor CEDS Connections that define aggregate metrics based on unit-level elements.
- Changes and additions to categories under K12 Student → Individualized Program were made as CEDS expanded for comprehensive coverages of special education data used locally for IEPs and compliance.

NDS Changes

The **Normalized Data Schema** also reflects significant changes in line with the changes to the DES and in response to maintenance requests from the field by organizations implementing physical models.

The NDS changes include

- changes that reflect all the updates to the standards and DES element contexts;
- renaming some tables based on name changes in the standards, such as LearningStandardItem to CompetencyFrameworkItem; and
- additional metadata properties.

New Metadata Properties

The NDS now includes additional metadata properties making it easier for technical users to understand the alignment between columns in the normalized model and elements in the standards.

Tables and columns generated from the MS-SQL scripts include these extended properties:

- CEDS_Element – The name of the CEDS element that the column represents
- CEDS_GlobalId – The CEDS element identifier
- CEDS_URL – URL to the version-specific page defining the element

Column Properties - Name

Select a page: General, Extended Properties

Script Help

Database: CEDS-NDS-V7

Collation: SQL_Latin1_General_CP1_CI_AS

Properties:

Name	Value
CEDS_Element	Assessment Form Name
CEDS_GlobalId	000024
CEDS_URL	https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=11024
MS_Description	The name of a given assessment form.

NDS Potentially Breaking Changes

For those with existing physical database implementations based on the NDS, the version 7 update includes some potentially “breaking changes.” If your current implementation uses any of the tables below, then scripts and code using these tables will need to be updated accordingly. Most of the impacted tables are to replace “LearningStandard” and “Achievement” tables and column names with new tables/columns for “Competency” and “Credential.”

The breaking changes are limited to the following tables:

- AchievementEvidence
- Achievement
- AssessmentParticipantSession_Accommodation (two columns affected: RefAssessmentAccommodationCategoryId and RefAssessmentAccommodationTypeId have been moved to AssessmentAccommodation RefAssessmentAccommodationCategoryId and RefAccommodationTypeId)
- AssessmentRegistration_Accommodation (three columns affected: RefAssessmentAccommodationCategoryId, RefAssessmentAccommodationTypeId, and OtherDescription have been moved to AssessmentAccommodation RefAssessmentAccommodationCategoryId, RefAccommodationTypeId, and OtherDescription)
- AssessmentSubtest_LearningStandardItem
- CourseSection (one column affected: RelatedLearningStandards has been replaced by RelatedCompetencyFrameworkItems)
- CompetencyItem_CompetencySet (one column affected: LearningStandardItemId has been replaced by CompetencyFrameworkItemId)
- ELChildService (one column affected: ReasonForDeclinedServices has been moved to ServicePlan)
- LearningGoal
- LearningStandardItemAssociation
- LearningStandardItemEducationLevel
- LearningStandardItem
- LearningStandardDocument
- RefAssessmentAccommodationType
- RefLearningStandardDocumentPublicationStatus
- RefLearningStandardItemAssociationType
- RefLearningStandardItemNodeAccessibilityProfile
- RefLearningStandardItemTestabilityType
- ServicesReceived (one column affected: RefServicesId has been moved to ServiceProvided)

Additional details are included in the NDS scripts provided with the version 7 release.

To preserve existing data in these tables, you will need to

1. comment out the portion at the end of the update script that contains **alter** and **drop** statements;
2. create the new tables with the modified version 7 update script;
3. populate the new tables from data in the existing tables and update any customized scripting that utilizes these tables and columns; and then
4. execute the **alter** and **drop** scripts that were previously commented out.

Detailed comments in the update scripts provided with the release support this process.

Look for the following text in the update script:

```
WARNING!!!!
```

```
Potentially breaking changes start here.
```

```
All data in these tables and columns should be moved to the new  
database locations before running any of the alter and drop statements  
below.
```

```
WARNING!!!!
```

See the CEDS Data Model User Guide (version 7) for more information.