

Common Education Data Standards (CEDS) Version 4 Data Model Guide

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INTRODUCTION

CEDS Version 4 includes a broad scope of elements spanning much of the P-20W spectrum and provides greater context for understanding the standards' interrelationships and practical utility. CEDS focuses on data elements and modeling in the Early Learning, K12, Career and Technical Education (CTE), Postsecondary, Adult Education, and Workforce sectors, as well as data domains for Assessments, Learning Standards, and Learning Resources. CEDS includes domains, entities, elements, options sets, and related uses.

The latest version of the standards and related resources can be found at the CEDS website:

<http://ceds.ed.gov>.

The CEDS "standards" are comprised of several pieces of information that provide context for and describe data items within CEDS:

- Domain
- Entity
- Element
- Option Set
- Related Uses (defined as Connections in the online CEDS CONNECT tool)
- Alternative names and other notes

The CEDS website includes three ways to view and interact with CEDS:

1. By Element — Via the CEDS elements page, users can access a searchable catalog of the CEDS "vocabulary."
2. By Relationship — Through the CEDS Data Model, users can explore the relationships that exist among entities and elements.
3. By Comparison — The CEDS Alignment Tool allows users to load their organization's data dictionary and compare it, in detail, to CEDS and the data dictionaries of other users.

THIS DOCUMENT

This document describes how to use the CEDS (v4) Data Model as published on the CEDS website. The CEDS Data Model includes a hierarchical schema of non-technical domains and entities with each CEDS element in context, and a fully normalized logical model. In addition to the normalized reference model, this document includes examples showing CEDS elements in the context of other types of data models, such as a star schema typically used in dimensional data warehouse design.

The Domain Entity Schema (DES)

The DES provides a user-friendly structure to easily identify elements organized by domain and entity. Later releases of CEDS will expand the domains and add additional elements and content within the current domains. The domains for CEDS version 4 include:

- Early Learning (abbreviated as EL)
- Elementary and Secondary Education (abbreviated as K12)
- Postsecondary Education (abbreviated as PS)
- Adult Education (abbreviated as AE)
- Career and Technical Education (abbreviated as CTE)
- Workforce (abbreviated as WF)
- Assessments
- Learning Standards
- Learning Resources

Entities are commonly thought of as persons, places, events, objects, or concepts about which data can be collected. An entity provides context for a data element. Some examples of entities are Early Learning Child, K12 Student, K12 Staff, Postsecondary Student, Postsecondary Institution, etc. There are over 70 entities in the DES.

The CEDS website presents the DES structure as a hierarchy of folders, making it easy to browse to an entity and expand to show its elements.

The Normalized Data Schema (NDS)

CEDS supports standardizing educational organizations and their relationships with other organizations, people, and time. The Normalized Data Schema is a reference model for operational implementations aligned to the CEDS standards. The P-20W focus of CEDS is supporting a transition from siloed, domain-specific, or location-specific datasets to data that are compatible across domains and geographic boundaries. In addition to existing state and federal reporting and for analysis and comparison of aggregate statistics, the standards support data that move with a learner from an early learning program to K12 to postsecondary and workforce learning programs.

The NDS supports the multiple roles and relationships with learning processes—the inputs, process steps (work), and outputs of learning.

The NDS is a 3rd normal form structure organized around the key concepts of organization, person, and role. The NDS was developed with the goal of supporting physical implementations that could function as an “operational data store” for integrated P-20W data, providing the most current available view of each organization, person, and role.

The NDS starts with a flexible directory of organizations that may have multiple parent-child relationships with each other. People exist independently, and roles exist within the context of their relationship to a specific organization for a specific date range.

Each person shares common attributes, or data points, that allows all levels to be represented as ‘Persons.’ Each Person has one or more ‘roles.’ Roles are a time-aware association between a Person and an Organization.

At the intersection of organizations, persons, and learning resources are key learning processes. CEDS includes process data elements definitions, such as assignments, activity, and achievements. Also defined in CEDS are the data elements and relationships covering formative, summative, and benchmark assessment processes. The NDS model also supports key relationships, such as between learning standards (and/or learner goals) and learning resources, assignments, and assessment items.

Naming Conventions and Key Terms

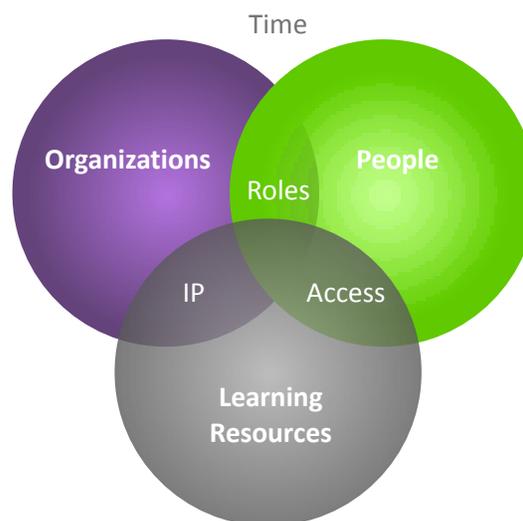
The CEDS initiative has adopted a set of naming conventions for data entities and elements for consistency. Terms and concepts found in element definitions, categories, and options or referred to in CEDS communications that may need further explanation are available in the glossary section of the CEDS website.

See <https://ceds.ed.gov/Glossary.aspx> for key terms related to CEDS.

The standard name of a data element in CEDS is defined for human readability and understandability, and to avoid possible confusion when using an element in different context or across domains.

CEDS elements also include a “Technical Name” in a more machine-readable format, which may support alignment with external technical standards. CEDS also supports an “Alternate Name” used for discoverability when searching. Unless otherwise set based on an external standard, CEDS technical names are the full CEDS element name with spaces and special characters

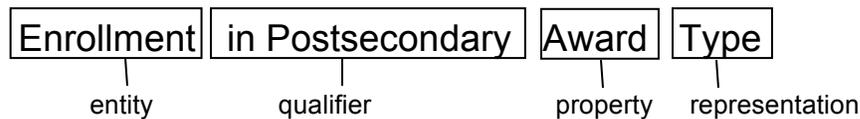
CEDS NDS Conceptual Model



removed and with initial caps on each word (Pascal case). For example, the CEDS element “Country Code” may be “CountryCode” in a physical implementation.

Based on ISO 11-179 [guidelines](#), CEDS element names have **name parts** that consist of discrete terms.

The parts are **entity** terms, **property** terms, **representation** terms (optional), and **qualifier** terms (optional). Consider the following illustration:



Entity Terms

Entity terms provide the context for an element. For example, in the data element names

- Person Middle Name;
- Accountability Report Title;
- Dental Insurance Coverage Type; and
- Advance Placement Credits Awarded,

the terms Person, Accountability Report, Dental Insurance Coverage, and Advance Placement are entity terms.

Property Terms

A property is an attribute common to all members of an *entity*. For example, all persons have a date of birth. For example, in the data element names

- Person Middle Name;
- Accountability Report Title;
- Dental Insurance Coverage Type; and
- Advance Placement Credits Awarded,

the terms Name, Title, and Credits Awarded are property terms.

(In this list, three of the element names have Entity – Property structure, and one (Dental Insurance Coverage Type) has Entity – Representation structure.)

Representation Terms

Representation terms describe the form of representation or the kind of information for which the data element is defined. For example, this document defines the following representation terms and their uses:

- “Indicator”
- “Status”
- “Identifier”
- “Descriptor”
- “Description”
- “Type”

In Dental Insurance Coverage Type, Type is a representation term. Element names use the “Type” suffix when the element has an option set, a controlled vocabulary of values used to classify or categorize the entity.

Qualifiers (optional)

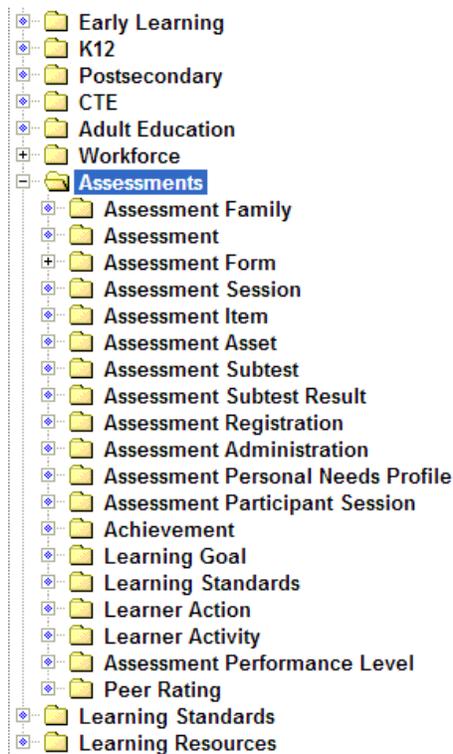
Entity terms define a context for an element. If the context is only applicable to one domain, the entity terms may include a **qualifier** to make it clear that the element is for a specific domain, for example, **Postsecondary Enrollment Type**. This makes it clear that this enrollment type element is defined for use in the postsecondary domain only, i.e., its options set may not be compatible with K-12 uses.

Qualifier terms may appear before or after an entity term as appropriate to convey meaning.

CEDS DOMAIN ENTITY SCHEMA

Domain Entity Schema (DES) Structure

The DES provides a user-friendly structure allowing stakeholders from each domain to easily identify elements they are interested in sorted by entity and attribute category.



1. The DES is a hierarchy of domains, entities, attribute categories, and attributes.
2. It is used primarily by people as an index to search, map, and organize elements.
3. CEDS elements may exist in more than one place in the DES.
4. It contains strong constraints specific to the sub-type.
5. The DES contains both granular and some derived/aggregated attributes.
6. The DES provides a framework for a more “flat” “denormalized” focused on facts of people and organization as of specific dates.

Domains

Domains provide a common perspective for stakeholders with differing backgrounds and interests to approach the model. Domains describe the various entities, their attributes, roles, and relationships, plus the constraints that govern the integrity of the model elements comprising that problem domain. The following table displays the CEDS domains:

Domain		Definition
Early Learning	EL	The stage in human development from birth through the early school years (often defined as birth to age 8), during which significant social, emotional, cognitive, language, psychological, and physical development occurs.
Elementary and Secondary	K12	The provision of a formal instructional program whose curriculum is designed primarily for students who have entered kindergarten through those who have exited high school.
Postsecondary	PS	The provision of a formal instructional program whose curriculum is designed primarily for students who are beyond the compulsory age for high school. This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes avocational and adult basic education programs. (IPEDS)
Adult Education	AE	The CEDS domain that includes information about programs that help adults get the basic skills they need to be productive workers, family members, and citizens -- and information about the adults served by these programs.
Career and Technical Education	CTE	The CEDS domain that includes information about Career and Technical Education programs as defined by Perkins IV, and information about the students served by these programs.
Workforce	WF	The CEDS domain that includes data about persons' participation in a workforce and employment development program and employment and earnings data matched between education and workforce data sources.
Assessment		The domain that includes entities and elements to support design, administration, and scoring/evaluating the results of assessments used to measure one or more persons' mastery of one or more learning objects.
Learning Standards		The data domain that includes entities and elements that define learner competencies established in learning standards documents, which may be adopted as expectations by education agencies, and may exist within the structure of a taxonomy or competency-based pathways.
Learning Resources		The CEDS Domain that includes information about materials that support teaching and learning.

Entities

Entities are persons, places, events, objects, or concepts about which data can be collected. An entity provides context for a data element. The following tables display CEDS entities grouped by domain:

Early Learning (EL)

The stage in human development from birth through the early school years (often defined as birth to age 8), during which significant social, emotional, cognitive, language, psychological, and physical development occurs.

Entity	Description
EL Child	A person for whom instruction, services and/or care are provided in an early childhood program under the jurisdiction of a school, education agency, or other institution or program.
Parent/Guardian	A person having parental or legal guardianship responsibility for a learner.
EL Family	All persons: (i) Living in the same household who are: (A) Supported by the income of the parent(s) or guardian(s) of the child enrolling or participating in the program; or (B) Related to the child by blood, marriage, or adoption; or (ii) Related to the child enrolling or participating in the program as parents or siblings, by blood, marriage, or adoption.
EL Organization	An institution that provides early learning services; this can be a grantee with delegates at various locations, possibly in one or more buildings; has an assigned administrator(s).
EL Staff	A person who performs specified activities for any public or private education institution, agency, or household that provides instructional and/or support services to students or staff at the early childhood level.
Staff Credential	An active certificate, license, permit, or other documentation held by an individual that authorizes the holder to perform certain functions or to make certain claims about his or her competencies in employment or assignment. Credentials are issued by a state agency (or in some cases by other organizations), postsecondary institution, or professional association based on education and training completed, experience, assessment, background verification, and/or other requirements.
Staff Professional Development Activity	An entity that includes information about a person's participation in a professional development activity and outcomes from that participation that may be related to a Professional Development Requirement. Note: The Staff Professional Development Activity may also be more granularly defined as a person's participation in a specific Professional Development Session, indicated by reference.

Professional Development Requirement	An entity that includes information about a requirement that a person participate in professional development related to a specific professional role or assignment.
Professional Development Activity	An entity that includes information about an activity designed for the purpose of developing someone professionally. Note: The Professional Development Activity is scheduled as one or more Professional Development Session and occur over multiple days and a information about a staff member's participation in a session or activity is included in Staff Professional Development Activity."
Professional Development Session	An entity that includes information about part or all of a Professional Development Activity scheduled for delivery within a single day.
Technical Assistance	An entity that includes information about technical assistance provided to a person or organization. Note: "Technical Assistance" is also a type of Professional Development Activity (see: Professional Development Activity Type)
EL Class/Group	A cohort of children receiving services together, or in some cases individually, usually for a predetermined amount of time, with at least one assigned primary teacher.
Assessments	The elements to support design, administration, and scoring/evaluating the results of assessments used to measure one or more persons mastery of one or more learning objectives.
Program	An entity with information about a system of services, opportunities, or projects, designed to meet academic or non-academic needs. Note: A Program entity may be related to an organization as the service provider and to people as program staff, participants, and recipients of program services. CEDS broadly defined Program for information about program types such as work-study programs or athletic programs that are not specifically defined. CEDS also has more specific program entities such as CTE Program.
Learning Goal	An entity that specifies the learning that is intended for an individual learner and the success criteria use to indicate progress toward the learning goal. In the formative assessment process a learning goal exists within the framework of a Learning Progression / Competency-based Pathway defined within the context of Learning Standards.
Learning Resource	The CEDS entity that includes information about materials that support teaching and learning.

Elementary and Secondary (K12)

The provision of a formal instructional program whose curriculum is designed primarily for students who have entered kindergarten through those who have exited high school.

Entity	Description
K12 School	An institution that provides educational services; has one or more grade groups (PK through 12); has one or more teachers; is located in one or more buildings; has an assigned administrator(s).
Local Education Agency (LEA)	An administrative unit within K-12 education at the local level that exists primarily to operate schools or to contract for educational services. These units may or may not be co-extensive with county, city, or town boundaries.
State Education Agency (SEA)	The SEA is the state-level entity primarily responsible for the supervision of the state's public elementary and secondary schools.
K12 Student	A person for whom instruction, services and/or care are provided in an elementary or secondary educational program under the jurisdiction of a school, education agency, or other institution or program.
Parent/Guardian	A person having parental or legal guardianship responsibility for a learner.
K12 Staff	An individual who performs specified activities for any public or private education institution, agency, or household that provides instructional and/or support services to students or staff at the early childhood level through high school completion.
K12 Course	The organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester or two-week workshop) to an individual or group of students (e.g., a class).
Course Section	<p>A setting in which organized instruction of course content is provided to one or more students for a given period of time.</p> <p>Note: A Course may be offered to more than one Course Section. Instruction may be delivered in person by one or more instructors or via a different medium. Sections that share space should be considered as separate Course Sections if they function as separate units for more than 50 percent of the time.</p>
Assessments	An instrument used to evaluate a person with at least one form, section, and Assessment Item. (A summative assessment typically addresses a particular level, subject, and date range. A person's individual responses during the summative assessment administration are evaluated then the results are scored using one or more Assessment Sub Test Scoring Rules.)

Program	<p>An entity with information about a system of services, opportunities, or projects, designed to meet academic or non-academic needs.</p> <p>Note: A Program entity may be related to an organization as the service provider and to people as program staff, participants, and recipients of program services. CEDS broadly defined Program for information about program types such as work-study programs or athletic programs that are not specifically defined. CEDS also has more specific program entities such as CTE Program.</p>
Incident	The occurrence of an infraction ranging from a minor problem behavior that disrupts the orderly functioning of a school or classroom (such as tardiness) to a criminal act that results in the involvement of a law enforcement official (such as robbery). A single event (e.g., a fight) is one incident regardless of how many perpetrators or victims are involved.
Calendar	A set of dates associated with an organization.
Learning Resource	The CEDS entity that includes information about materials that support teaching and learning.
Financial Account	An entity that includes information about one item in a chart of accounts for which money or the equivalent is spent or received.
Organization Account Value	An entity that includes budgeted and/or actual values for the specified Account and specified accounting period or academic Session.
Session	An entity with information about a period of time.
Rubric	An entity that includes information about an instrument used to communicate expectations of quality around a task, product, or performance and/or used to delineate consistent criteria for grading.
Rubric Criterion	An entity that includes information about the criteria that must be met to demonstrate quality for a product, process, or performance task.
Rubric Criterion Level	An entity that includes information about a degree of achievement on a product, process, or performance task, and the benchmarks or qualitative indicators attributed to that degree of achievement.
Allergy	An entity that includes information about a person's reaction to an allergen.
Staff Credential	An active certificate, license, permit, or other documentation held by an individual that authorizes the holder to perform certain functions or to make certain claims about his or her competencies in employment or assignment. Credentials are issued by a state agency (or in some cases by other organizations), postsecondary institution, or professional association based on education and training completed, experience, assessment, background verification, and/or other requirements.

Staff Professional Development Activity	<p>An entity that includes information about a person's participation in a professional development activity and outcomes from that participation that may be related to a Professional Development Requirement.</p> <p>Note: The Staff Professional Development Activity may also be more granularly defined as a person's participation in a specific Professional Development Session, indicated by reference.</p>
Professional Development Requirement	An entity that includes information about a requirement that a person participate in professional development related to a specific professional role or assignment.
Professional Development Activity	<p>"An entity that includes information about an activity designed for the purpose of developing someone professionally.</p> <p>Note: The Professional Development Activity is scheduled as one or more Professional Development Session and occur over multiple days and a information about a staff member's participation in a session or activity is included in Staff Professional Development Activity."</p>
Professional Development Session	An entity that includes information about part or all of a Professional Development Activity scheduled for delivery within a single day.
Technical Assistance	<p>An entity that includes information about technical assistance provided to a person or organization.</p> <p>Note: "Technical Assistance" is also a type of Professional Development Activity (see: Professional Development Activity Type)</p>
Learning Goal	An entity that specifies the learning that is intended for an individual learner and the success criteria use to indicate progress toward the learning goal. In the formative assessment process a learning goal exists within the framework of a Learning Progression / Competency-based Pathway defined within the context of Learning Standards.
Achievement	An entity that includes information about achievement earned by a learner upon fulfilling a specified criteria, which may be defined by a related a Competency Set.
Facility	An installation in which school administration at the district or system level is housed; includes all buildings, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and that are used for district or system administrative purposes.
Authentication	An application or service that can authenticate the identity of a person. The CEDS entity that includes information about an authentication provider, the login identifier used to authenticate a person's identity, and other information related to authentication of a person's identity.

Authorization	The CEDS entity that includes information about a data system or application that an authenticated person may access.
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Postsecondary (PS)

The provision of a formal instructional program whose curriculum is designed primarily for students who are beyond the compulsory age for high school. This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes avocational and adult basic education programs. (IPEDS)

Entity	Description
PS Institution	An organization that provides educational programs for individuals who have completed or otherwise left educational programs in secondary school(s).
PS Student	An individual who is a prospect, applicant, admitted student, enrolled student or alum of a postsecondary institution.
PS Section	A postsecondary instructional course in a particular field of study that typically involves a prescribed number or instruction periods or meetings for enrolled students.
PS Staff	A person who performs specified activities for any public or private education institution, agency, or household that provides instructional and/or support services to students or staff at the postsecondary level.
PS Applicant	An individual who is a applicant of a postsecondary institution.
Parent/Guardian	A person having parental or legal guardianship responsibility for a learner.
Assessment	The elements to support design, administration, and scoring/evaluating the results of assessments used to measure one or more persons mastery of one or more learning objectives.
Learning Resource	The CEDS entity that includes information about materials that support teaching and learning.
Learning Goal	An entity that specifies the learning that is intended for an individual learner and the success criteria use to indicate progress toward the learning goal. In the formative assessment process a learning goal exists within the framework of a Learning Progression / Competency-based Pathway defined within the context of Learning Standards.
Authentication	An application or service that can authenticate the identity of a person. The CEDS entity that includes information about an authentication provider, the login identifier used to authenticate a person's identity, and other information related to authentication of a person's identity.

Authorization The CEDS entity that includes information about a data system or application that an authenticated person may access.

Career and Technical Education (CTE)

The CEDS domain that includes information about Career and Technical Education programs as defined by Perkins IV, and information about the students served by these programs.

Entity	Description
CTE Student	An entity that includes information about a person for whom instruction, services and/or care are provided in a Career and Technical Education program and has met the state-defined threshold of Career and Technical Education participation as defined in the State's approved Perkins IV State Plan.
CTE Staff	An entity that includes information about an individual who performs specified activities for any public or private education institution, agency, or household that provides instructional and/or support services to students or staff in a Career and Technical Education program.
Program	<p>An entity with information about a system of services, opportunities, or projects, designed to meet academic or non-academic needs.</p> <p>Note: A Program entity may be related to an organization as the service provider and to people as program staff, participants, and recipients of program services. CEDS broadly defined Program for information about program types such as work-study programs or athletic programs that are not specifically defined. CEDS also has more specific program entities such as CTE Program.</p>
Course	The organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester or two-week workshop) to an individual or group of students (e.g., a class).
Course Section	<p>A setting in which organized instruction of course content is provided to one or more students for a given period of time.</p> <p>Note: A Course may be offered to more than one Course Section. Instruction may be delivered in person by one or more instructors or via a different medium. Sections that share space should be considered as separate Course Sections if they function as separate units for more than 50 percent of the time.</p>
Authentication	An application or service that can authenticate the identity of a person. The CEDS entity that includes information about an authentication provider, the login identifier used to authenticate a person's identity, and other information related to authentication of a person's identity.
Authorization	The CEDS entity that includes information about a data system or application that an authenticated person may access.

Adult Education (AE)

The CEDS domain that includes information about programs that help adults get the basic skills they need to be productive workers, family members, and citizens, and information about the adults served by these programs.

Entity	Description
AE Student	A person for whom instruction and/or services are provided in an Adult Education program.
AE Staff	A person who is employed by an Adult Education program.
AE Provider	The CEDS entity with information about programs that help adults get the basic skills they need to be productive workers, family members, and citizens.
Program	<p>An entity with information about a system of services, opportunities, or projects, designed to meet academic or non-academic needs.</p> <p>The Program entity may be related to an organization as the service provider and to people as program staff, participants, and recipients of program services. CEDS broadly defined Program for information about program types such as work-study programs or athletic programs that are not specifically defined. CEDS also has more specific program entities such as CTE Program.</p>
Course Section	<p>A setting in which organized instruction of course content is provided to one or more students for a given period of time.</p> <p>Note: A Course may be offered to more than one Course Section. Instruction may be delivered in person by one or more instructors or via a different medium. Sections that share space should be considered as separate Course Sections if they function as separate units for more than 50 percent of the time.</p>
Authentication	An application or service that can authenticate the identity of a person. The CEDS entity that includes information about an authentication provider, the login identifier used to authenticate a person's identity, and other information related to authentication of a person's identity.
Authorization	The CEDS entity that includes information about a data system or application that an authenticated person may access.

Workforce

The CEDS domain that includes data about persons' participation in a workforce and employment development program and employment and earnings data matched between education and workforce data sources.

Entity	Description
Workforce Program Participant	A person for whom instruction and/or services are provided in a workforce and/or an employment development program.
Quarterly Employment Record	The CEDS entity that includes person-level employment and earnings information from quarterly employment and earnings-related data from sources such as State UI Wage Records, the Wage Record Interchange System, or the Federal Employment Data Exchange System (FEDES).
Authentication	An application or service that can authenticate the identity of a person. The CEDS entity that includes information about an authentication provider, the login identifier used to authenticate a person's identity, and other information related to authentication of a person's identity.
Authorization	The CEDS entity that includes information about a data system or application that an authenticated person may access.

Assessments

The data domain that includes entities and elements to support design, administration, and scoring/evaluating the results of assessments used to measure one or more persons' mastery of one or more learning objectives.

Entity	Description
Assessment Family	A set of assessments with a common name, jurisdiction, or focus (e.g. SAT, GRE, NAEP).
Assessment	An instrument used to evaluate a person with at least one form, section, and Assessment Item. (A summative assessment typically addresses a particular level, subject, and date range. A person's individual responses during the summative assessment administration are evaluated then the results are scored using one or more Assessment Sub Test Scoring Rules.)
Assessment Form	An instance of an assessment that can equate scores with another instance of that same assessment.
Assessment Session	An entity with information related to an instance of delivering an assessment during a specific period of time.
Assessment Item	A specific prompt, that defines a question or protocol for a measurable activity that triggers a response from a person used to determine whether the person has mastered a learning objective.
Assessment Asset	An entity that represents content used to compose an assessment item, is referenced by an item but not part of the item content itself, or is content that is included as part of a section within an assessment form. Assets can be static content such as artwork or dynamic assets such as calculators or other tools.

Assessment Subtest	An entity that defines information for scoring an Assessment Form based on a set of Assessment Item responses with explicit rules to produce an Assessment Subtest Result, which may be for the entire Assessment Form or one aspect of evaluation based on a subset of Assessment Items.
Assessment Subtest Result	An entity that includes information about a person's results from an assessment, which may be for the entire assessment or one aspect of evaluation. The scoring method is defined by the related Assessment Subtest. The entity includes the score value and information about the score, such as a diagnostic statement.
Assessment Registration	An entity with information related to a specific person registered for an Assessment Administration, assigned a specific Assessment Form for participation in one or more Assessment Sessions.
Assessment Administration	Information related to an assessment event or administration period. It includes information related to the time period of administration, and place(s) of administration
Assessment Personal Needs Profile	An entity that includes information about the personal needs and preferences for assessment participants, based on the IMS Global (R) Accessible Portable Item Protocol.
Assessment Participant Session	An entity that includes information about a specific person's participation in an Assessment Session.
Achievement	An entity that includes information about an achievement earned by a learner upon fulfilling a specified criteria, which may be defined by a related a Competency Set.
Learning Goal	An entity that specifies the learning that is intended for an individual learner and the success criteria use to indicate progress toward the learning goal. In the formative assessment process a learning goal exists within the framework of a Learning Progression / Competency-based Pathway defined within the context of Learning Standards.
Learning Standards	Content that either describes a specific competency (learning objective) or describes a grouping of competencies within the taxonomy of a Learning Standards Document.
Learner Action	An entity with information about detailed actions taken by a learner while engaging in learning activities, such as asking for a hint when taking an online formative assessment.
Learner Activity	The work assigned to a learner and/or performed by a learner, which can comprise of interaction with learning resources, and assessments.
Assessment Performance Level	The CEDS entity that includes information about the performance levels that may be assigned to an Assessment Subtest Result and specifications for selecting the performance level based on a score. Four styles are supported: 1) Specification of performance level by lower and upper cut score 2) Specification of performance level by lower cut score only 3) Specification of performance level without any mapping to scores 4) Specification of performance level by mapping to other scores
Assessment Item Response	Information related to the a specific response to an assessment item by the person being assessed. The entity includes the response, a score or indication that the response was correct or incorrect and other information such as response time.
Assessment Form Subtest Assessment Item	An entity that includes information about an Assessment Item associated with a and Assessment Form Subtest including weights to apply to items for scoring.
Assessment Item Body	An entity that contains information for rendering an Assessment Item as one or more interactions with the person being assessed.

Learning Standard Item Association	An entity that relates learning standard items to other learning standard items to support competency maps using competency to prerequisite-competency assertions, and to relate learning standard Items to other objects such as learning resources.
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Learning Standards

The data domain that includes entities and elements that define learner competencies established in learning standards documents, which may be adopted as expectations by education agencies, and may exist within the structure of a taxonomy or competency-based pathways.

Entity	Description
Learning Standard Document	A collection of learning standard items, typically arranged in a hierarchical structure or classification scheme, reflecting expectations of learner competencies within a single subject area covering one or more levels. (examples: Head Start Child Outcomes Framework, Common Core State Standards for Mathematics, Accountability Criteria for National Health Care Cluster Foundation Standards)
Learning Standard Item	<p>Content that either describes a specific competency (learning objective) or describes a grouping of competencies within the taxonomy of a Learning Standards Document.</p> <p>Note: Use the element Learning Standard Item Type to indicate the level of grouping in a hierarchy, e.g. "Subject", "Strand", "Competency". A competency may have child learning standard items of type "Indicator" used to describe how that competency may be assessed. The elements Learning Standard Item Statement and Learning Standard Item Notes may be used to describe a procedure for an observation-based assessment of learning and any citations or notes supporting the method. Learning Standard Items may be associated with other entities, such as Assessment Items, using "Learning Standard Item Association" (See the CEDS Data Model Guide for example uses of the Learning Standard Item framework.)</p>
Learning Standard Item Association	An entity that relates learning standard items to other learning standard items to support competency maps, and to relate learning standard Items to other objects such as learning resources.
Competency Set	The CEDS entity that supports the definition of a set of competencies that represent completion or partial completion of a unit, course, program, degree, certification, or other achievement/award, including information that specifies whether completion requires achievement of all items in the set or some number of items.

Learning Resources

The CEDS Domain that includes information about materials that support teaching and learning.

Entity	Description
Learning Resource	An entity that describes content, materials, or informational resources that support learning.
Peer Rating	The CEDS entity that includes information about a persons rating of a Learning Resource.
Peer Rating System	The CEDS entity that includes information about a system by which a person can rate a Learning Resource.

CEDS NORMALIZED DATA SCHEMA (NDS)

Entity Relationship Diagrams (ERD) provide a visual representation of how the tables, or ideas, within a data model pertain to each other. The Normalized Data Schema (NDS) is available in PDF format, SQL for import into data modeling tools, and is included in Appendix A of this document.

The nomenclature used to describe the NDS includes terms often used for a physical model. This is to facilitate the comprehension of the contents since more people are familiar with physical terms (table, fields) as opposed to the logical terms (entity, attributes). Additionally, since the terms *entity* and *attribute* are used within the DES, using the physical terms when discussing the ERD differentiates the context.

NDS Core Structure Logic

The NDS Logical Model provides a logical database model, normalized to Third Normal Form¹, such as might be used for integration of P-20 data systems through a well-normalized “operational data store.” This CEDS logical model includes longitudinal aspects, such as for tracking enrollment status over time; however, it does not directly address the production aspects of log and change management. When physically implemented, a sub-model supporting the audit of edits to all attributes may be utilized.

Comparability of education data has some exciting possibilities for all educators, administrators, and vendors. Much like how XML provides comparability/interoperability for data-in-motion, the NDS is for data-at-rest. It serves to provide a level of interoperability that means

- standardized terminology promotes more effective communication and streamlines knowledge transfer;
- mapping takes less effort;
- development of reports/imports/exports/dashboards/modules can be more easily shared across organizations;
- centralized or base-lined design documentation; and
- resources can be shared.

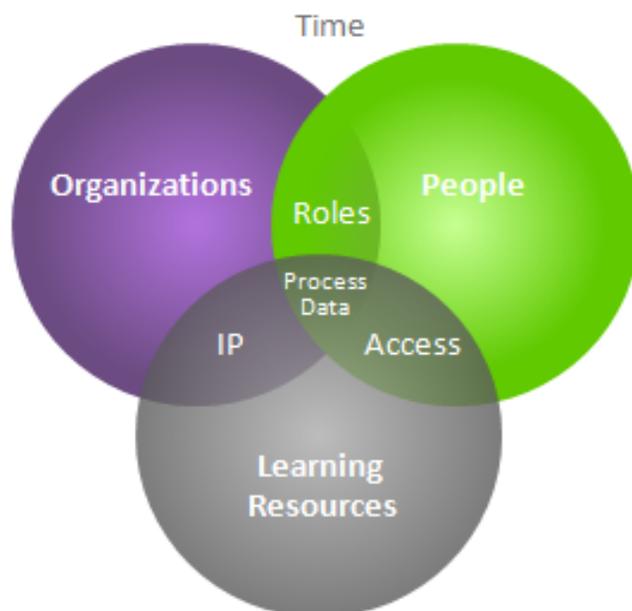
Traceability largely addresses internal aspects of a P-20 system. It ensures that the data surrounding a person’s education can be persistently stored and accurately retrieved.

In order to provide a data model that promotes comparability and traceability across the P-20W spectrum, the data abstraction process must reconcile myriad sources, interpretations, and definitions for each data structure. Creating a highly normalized data model best promotes these requirements.

¹ http://en.wikipedia.org/wiki/Third_normal_form

The resulting model is flexible, and supports the diversified needs across P-20W education agencies, while providing a consistent approach that supports comparability. Consequently, a layer of abstraction exists based upon the key concepts of:

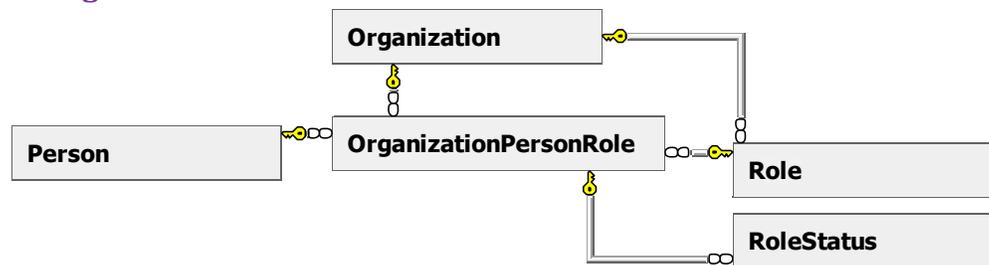
- Time – The relevance of data is constrained by time
- Person – An individual
- Organization – Any organizing *entity* that is not a person; e.g., school, district, program, institution, course section, jurisdiction, etc.
- Role – A date-sensitive affiliation between a Person and an Organization
- Learning Processes – The inputs, process steps, and outputs related to the work of people and education organizations.



People in the NDS only have roles in relationship to a specific organization AND a designated date range.

NDS Entity Relationship Model

High Level Logical Model



Normalization and the NDS Model

Normalization is a data structuring process to:

- Eliminate redundancies – Prevents update anomalies and reduces the amount of stored data;
- Ensure the accuracy of data – Prevents insert anomalies and guarantees the quality of the data;
- Understanding of data – Discrete objects clearly identify purpose;
- Scalability – Better accommodate growth; and
- Extensibility – Facilitates modification to the model.

A system is considered to be well normalized if it meets the Third Normal Form. C.J. Date said that database design is common sense formalized. Applying normalization is quite similar to factoring algebraic equations: reduce factors to like terms. Identifying whether or not an attribute exists always or sometimes determines the ‘optionality’ or ‘nullability.’ Determining what type of it has relationship (a person has one birthplace, a person may speak one or more languages) determines the ‘cardinality.’

As a result of normalization, some CEDS elements are not represented as distinct fields in the NDS. However, every CEDS element is supported. For example, the CEDS elements Organization Name (000204), Name of Institution (000191), Program Name (000626), Responsible Organization Name (000631) all normalize to Organization:Name in the NDS.

Normal Forms

Each form must comply with the lower-level forms. The main premises of the first three normal forms are:

- First Normal Form (1NF) – Records are uniquely identifiable and contain no repeating fields
- Second Normal Form (2NF) – All attributes are directly dependent on the primary key
- Third Normal Form (3NF) – Non-key fields do not have dependencies on other non-key fields

Reference Data

When a known set of values exists, as defined in the *option set* of a CEDS element, the model uses a reference table. In the data model, reference tables use the prefix “Ref.”

Version 4 introduced redesigned reference tables and scripts to populate them with option sets from the version 4 CEDS elements. The redesigned reference tables improve the consistency between the DES and NDS models. CEDS Option Sets and NDS reference tables include:

- **Code:** A machine-readable value that uniquely identifies the option. Codes contain a numeric or alphanumeric string with no spaces. In some cases “spacer” characters are used including hyphen (-), slash (/), period(.), and underscore (_). All options contain at-least one code value.
- **Description:** A human readable label or short description of the option up to 100 characters with spaces.
- **Definition:** Longer human-readable text defining the option.

Surrogate Keys

Surrogate keys were used instead of natural keys in order to simplify joins. Joins are simplified in that there is always one field to join to one table. Composite keys, which require one or more fields and data knowledge in order to join tables, were not used for this data model. Additionally, surrogate keys allow the logical primary key to be changed without implementing logic to handle the change. This was considered necessary in order to support the wide range of datasets since some potential users of this model allows for primary keys to change over time.

While surrogate keys typically are not represented in a logical model, the prevalence of super-typed/sub-typed data combined with education data being so closely tied to organization identifiers and person identifiers resulted in the decision that they be included.

Use of Sub-types/Super-types

In order to provide a database that is flexible enough to fit multiple business models, configurable hierarchies and reference data are critical. To promote association of these concepts, NDS uses sub-types/super-types construct. Sub-types/super-types may be used when an idea has common and different elements. For example, a parent and an Early Learning child both can be categorized as people and share certain people elements, such as birth date and home address. However, only the parent will have a job and only the child will have a lunch program.

NDS utilizes three super-types:

- Person – Data about people
- Organization – Any *thing* that is not a person, such as a district, a school, or a course
- Role (OrganizationPersonRole)– A person’s data that relates to an organization, such as a student’s attendance

Common Model

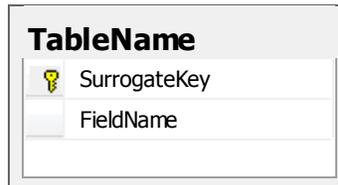
Each of the three super-types (Person, Organization, Role) contains information that applies to all types. For example, each person, regardless of role, has demographic information; all types of organizations may have calendar information.

Understanding the NDS Entity Relationship Diagrams

NDS Table and Field Syntax

Tables

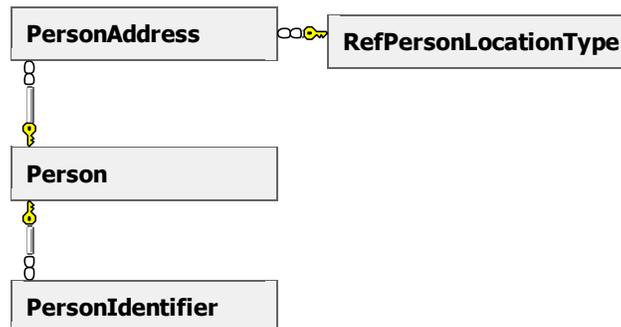
Tables are represented as a rectangle. The surrogate key is indicated by a key  symbol.



The function of the surrogate key is to uniquely identify one record from all other records within the same table. The CEDS model has utilized a design standard of 'surrogate keys.' Surrogate keys do not replace primary keys, but they simplify using them.

Relationships

The heart of the entity relationship diagram (ERD) is illustrating how data relates to itself. By effectively using lines and boxes, we can gather understanding from a simple diagram:



This tells us that a Person may have an Address and an Identifier. The ∞ symbol tells us that there may be more than one address and identifier for a Person. We also know by the "Ref" table that the PersonLocationType field in the PersonAddress table uses a CEDS controlled vocabulary. "Ref" tables represent the option set defined for CEDS elements.

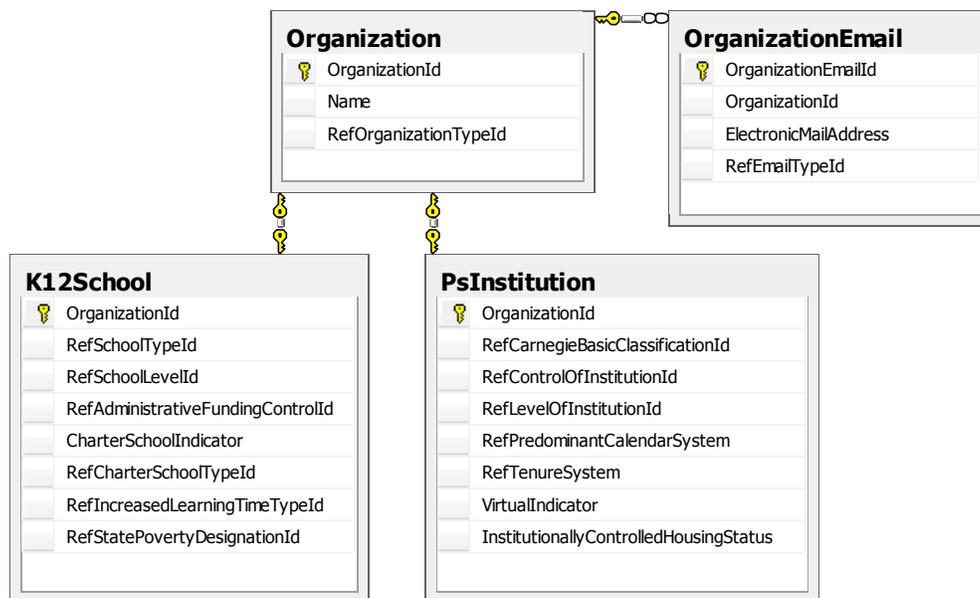
The NDS model leaves it up to the implementation to define additional business rules. For example, a system may apply a business rule to limit the number of PersonIdentifiers that may be associated with a Person, or to ensure that a PersonIdentifier for a given Person Identification System must be unique. A best practice for multi-tiered applications is to enforce such rules at all tiers of the application.

Since the CEDS Data Model uses surrogate keys, the presence of identifying relationships is reduced to sub-type/super-type relationships.

The symbols on the ends of the lines indicate the cardinality of the relationship. Key to infinity symbols  represents a one-to-many relationship, and a key-to-key  represents a one-to-one

relationship, such as a sub-type relationship. For example, K12 School is a sub-type of Organization: their relationship on a diagram has a key on both ends.

Sub-Type/Super-Type: Sub-type/super-type relationships indicate that a record of super-type may have a corresponding sub-type record, but a sub-type record cannot exist without the parent super-type. The power of sub-typing/super-typing is that it allows one object to have a different set of properties. By extension, this mechanism allows multiple tables to be referenced by one common object. For example, a K12 School and a postsecondary institution are two kinds of organizations. Common attributes include a name and zero or more email addresses, but they each have some domain-specific attributes as well. Notice in the diagram below that both K12School and PsInstitution use the surrogate key (OrganizationId) of the parent table (Organization).



Finding CEDS Elements in the NDS model

All CEDS elements are supported in the NDS model. Sometimes there will be a one-to-one correspondence between the CEDS element and a table column in the NDS model, e.g., the CEDS element Financial Account Name corresponds to the Name column in the NDS table “Financial Account.” In other cases, as a result of normalization, CEDS elements may not represent distinct fields in the NDS. For example, consider the following element:

Early Learning Child Developmental Screening Status

UPDATED!

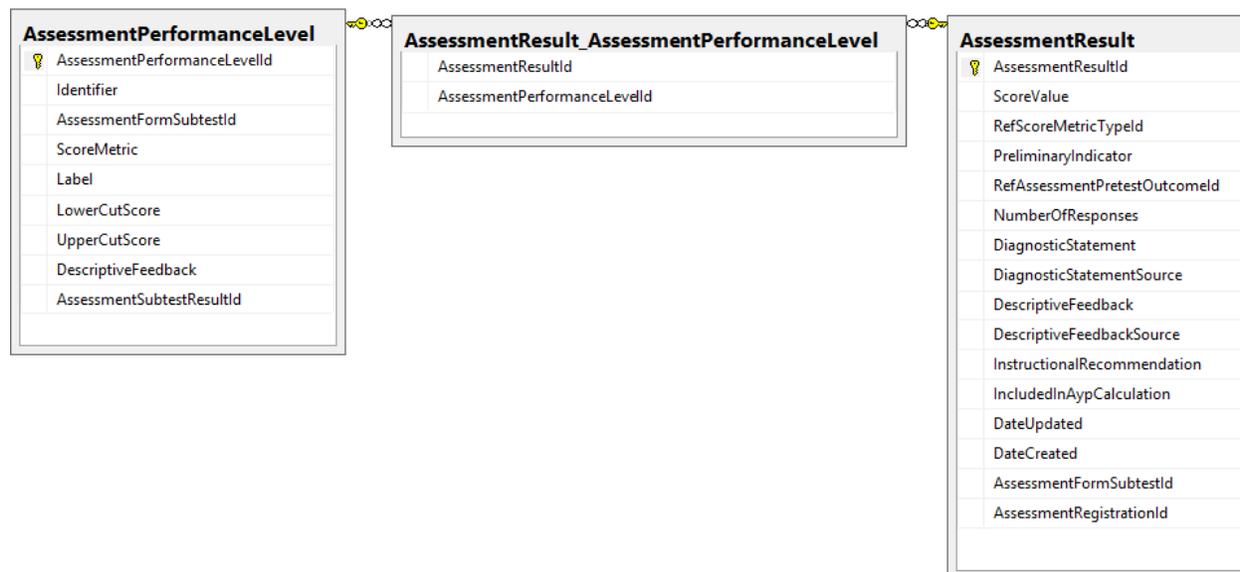
Definition

The result of a brief standardized screening tool aiding in the identification of children at risk of a developmental delay/disorder.

Option Set

Further evaluation needed	FurtherEvaluationNeeded
No further evaluation needed	NoFurtherEvaluationNeeded
No Screening Performed	NoScreeningPerformed

The element represents a specific kind of Assessment Result. The NDS already has a well-developed model supporting assessment results that may be used as shown below. Each of the three values in the option set may be stored as “Assessment Performance Level” using an “Assessment Performance Level Identifier” and “Assessment Performance Level Label.” Then the result of an early learning screening, “Early Learning Child Developmental Screening Status,” may be recorded as an Assessment Result and linked to the appropriate Assessment Performance Level.



CEDS Use within P-20W Enterprise and Web-Scaled Architectures

A typical SEA-LEA architecture is made up of source systems, an operational data store, and a data warehouse for analytics and reporting. Data that moves from an authoritative source transactional system to other integrated systems and operational data store(s) most often must be transformed for compatibility with the receiving system. The CEDS NDS reference model is normalized to represent an example structure for a P-20W operational data store. This section also provides an example of CEDS data elements, as they may exist in a de-normalized P-20W state longitudinal database.

CEDS standardizes data element definitions and option sets so to make the data more compatible and to serve as a common vocabulary. CEDS does not define the standards for the movement of data, but organizations that do set standards for data movement have embraced CEDS as a common vocabulary.

The common vocabulary of CEDS recognizes that different data models are used to support different uses. It was beyond the scope of CEDS version 3 to develop a data warehouse model; however, the following example data warehouse star schemas demonstrate application of the CEDS standards into a data warehouse domain of the P-20W enterprise architecture.

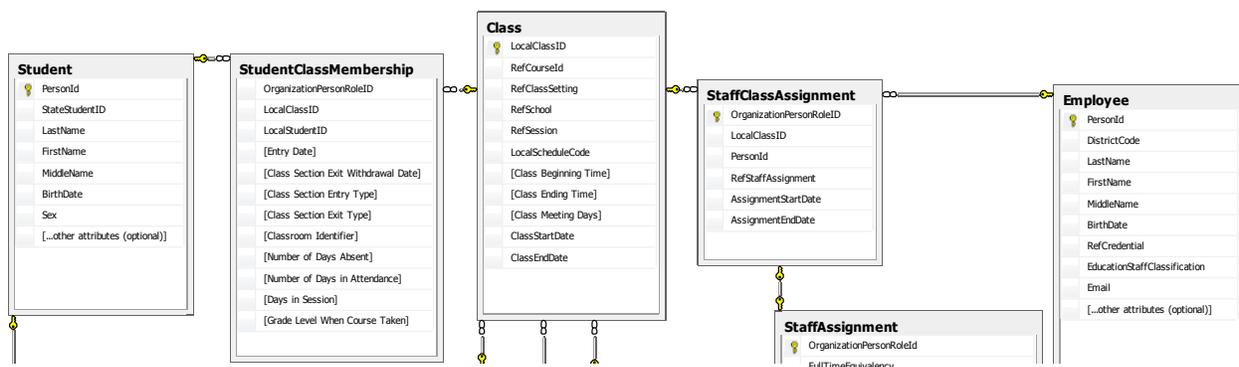
Case Study: The Teacher-Student Data Link – Data to Analyze Student Growth and Teacher Preparation

For this example, we look at data that link students to teachers and data that link teachers to their educator preparation programs. A number of factors make this example a good fit. First, it reaches across domains (K12, PS, and Assessments) and involves data from multiple source systems. It involves some interesting transformations of data between the schemas of source systems, i.e., the CEDS NDS as a reference P-20W *normalized* operational data model and an example *denormalized* star schema. It also involves the high profile data domains of enrollment and assessment results.

The example uses student growth rather than achievement, recognizing that there are multiple methods for measuring student growth. In this example, we will recognize that there is a step of calculating growth from assessment data, but not get into the details of any specific method. The target data model is designed to receive those metrics using one or more methods.

It is also worth noting that student growth based on assessment data is just one of multiple measures when using the teacher-student data link to answer questions about educator preparation program effectiveness. Other measures of teacher effectiveness, such as classroom observations and student surveys, and other measures of program effectiveness are needed.

We start with an example source system that links teachers to students as course-section enrollment records. The following illustration shows how the teachers and students might be linked through a Course Section in a student information system.



(Note: This is a fictitious view of data as it might be structured in a student information system. It is not part of the CEDS DES or NDS models.)

A “Student Class Membership” record captures a student’s enrollment in a class (Course Section) with details such as Start Date and End Date. Similarly, a “Staff Class Assignment” record captures a teacher’s association with the class including Start and End dates, the teacher’s Role, and a Teacher Of Record Indicator.

[Note: This example does not cover all of the necessary issues to be addressed when implementing the use of teacher-student data links. Key success factors such as teacher-of-record policies, data governance policies, source system readiness, roster verification, and scheduling processes must be

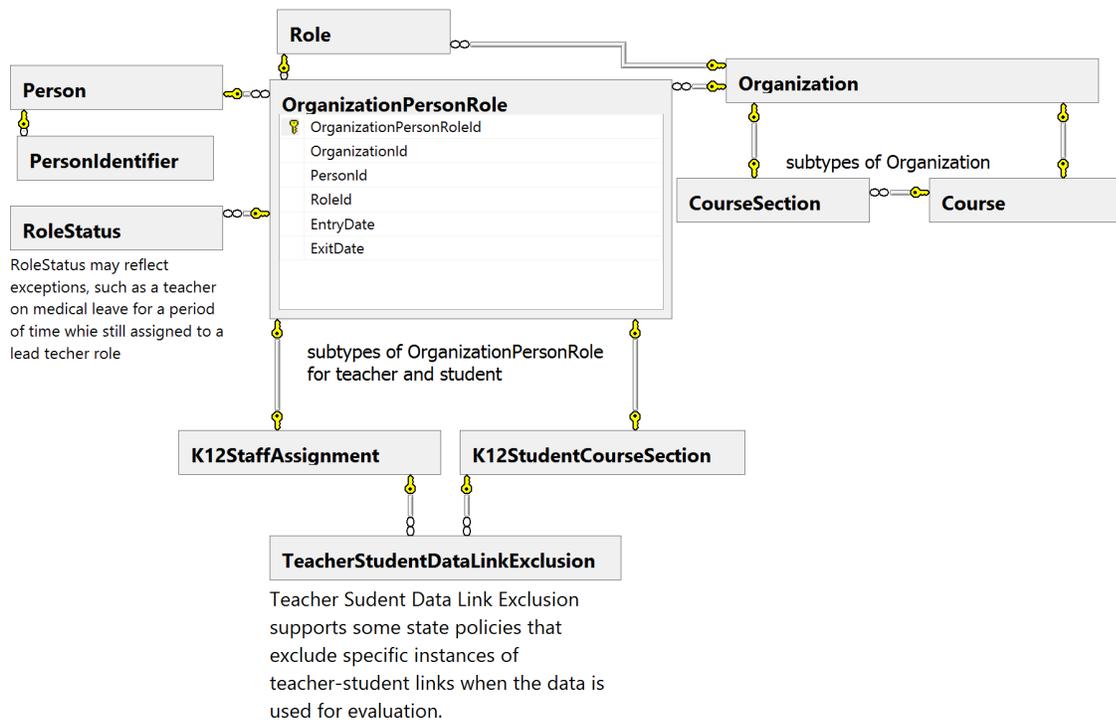
considered. For more information, see the *Forum Guide to the Teacher Student Data Link – A Technical Implementation Resource*, from the National Forum on Education Statistics, which is available at http://nces.ed.gov/forum/pub_2013802.asp. Information about TSDL implementation is also available at www.tsdl.org.]

From Source System to Operational Data Store

A P-20W implementation must transform the data from the source system into a data schema such as the CEDS Normalized Data Schema (NDS). Both systems may use elements defined by the CEDS standards, but the structure of the data is different.

A key difference is that the source system defines “student” and “employee” as separate entities, whereas the NDS model takes a P-20W approach in that a “person” may have the role of a PS Student while enrolled in a teacher prep or professional development program. The same “person” takes on the role of a teacher when assigned to a K12 Course Section. The NDS model also normalizes K12CourseSection as a subclass of Organization.

The following illustration shows how the CEDS NDS is organized by person-organization-role and the section of the data model pertaining to the teacher-student data link:



In this model, each person associated with the course section is represented as a record in **OrganizationPersonRole**. If the person is a teacher, teacher’s aide, or paraprofessional, the model uses **K12StaffAssignment** to capture information required for that type of association. If the person is a student, the model uses **K12StudentCourseSection** to capture information required for a student’s association with the course section.

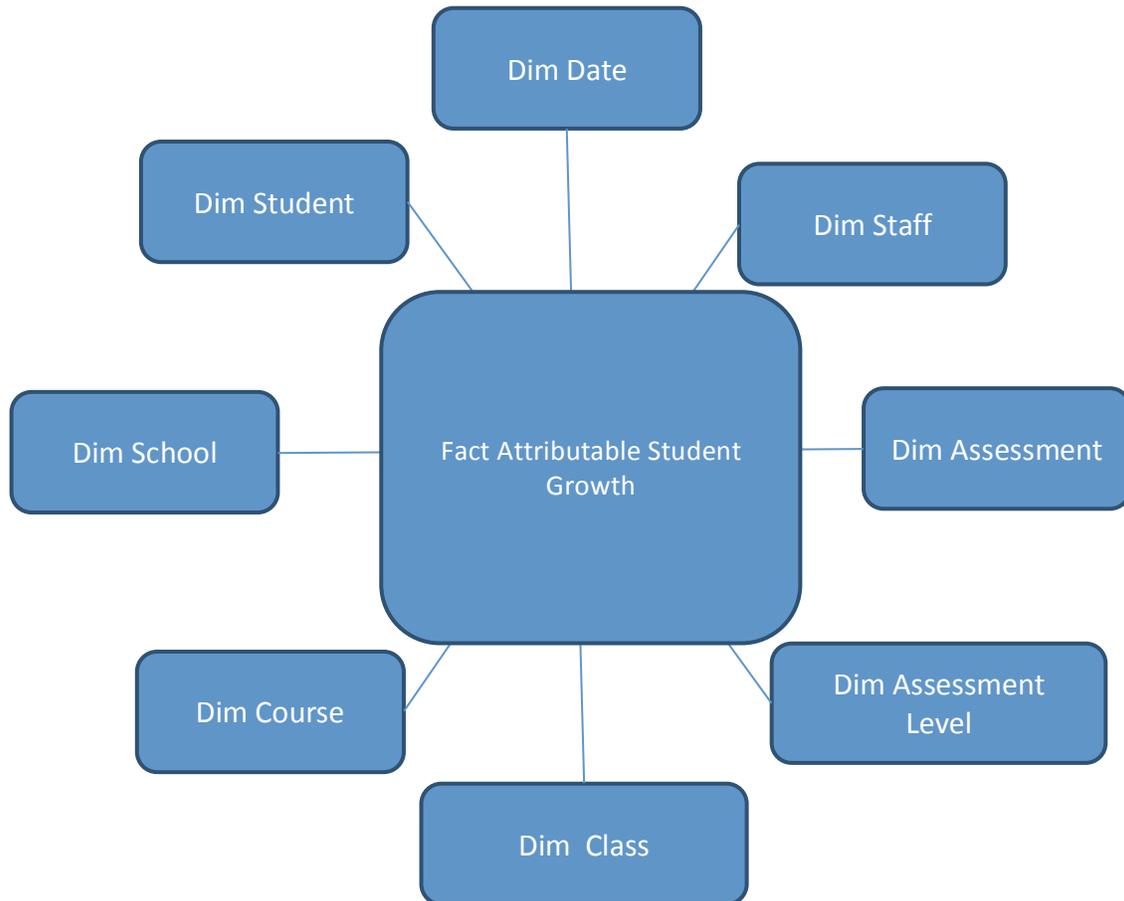
The OrganizationPersonRole table includes the ExitDate and EntryDate fields that apply to the student enrollment or staff assignment to the course section. This allows for capture of specific “dosage” information often required for teacher-student data link analysis. For example, a teacher that goes on medical leave, is replaced temporarily, and then returns later in the year may have two records in OrganizationPersonRole for the course section, one with EntryDate=2013-09-01 and ExitDate=2013-10-15, and another with EntryDate=2014-02-03 and ExitDate=2014-06-17. (RoleStatus may also be used to capture changes in the person’s association with the course section over time that might be factored into TSDL metrics.)

To transform the data from the K12 source system to the P-20W operational data schema:

1. Personal information about Student and Staff (teacher) needs to be transformed into the Person tables of the NDS;
2. Information about the course section and corresponding course needs to be transformed into Organization, CourseSection, and Course; and
3. Information about course section enrollment for a student and teachers’ assignments needs to be transformed into the model that uses the common OrganizationPersonRole.

Moving to the Data Warehouse

A best practice for the reporting structure is a “star schema” data structure with FACT tables representing numeric measures (e.g., student growth) with conformed DIMENSION tables containing attributes by which the fact data are filtered, sorted, and labeled (e.g., school name, teacher identifier, course-section identifier). The following diagram shows an example of a “star schema” data model that might be used in a dimensional data warehouse.



Like the transformation from the K12 student information system to the P-20W operational data store, a transformation from the normalized data store to the de-normalized star schema in the data warehouse is needed due to the differences in structure. Moreover, like the previous transformation, both schemas may use CEDS standard element definitions.

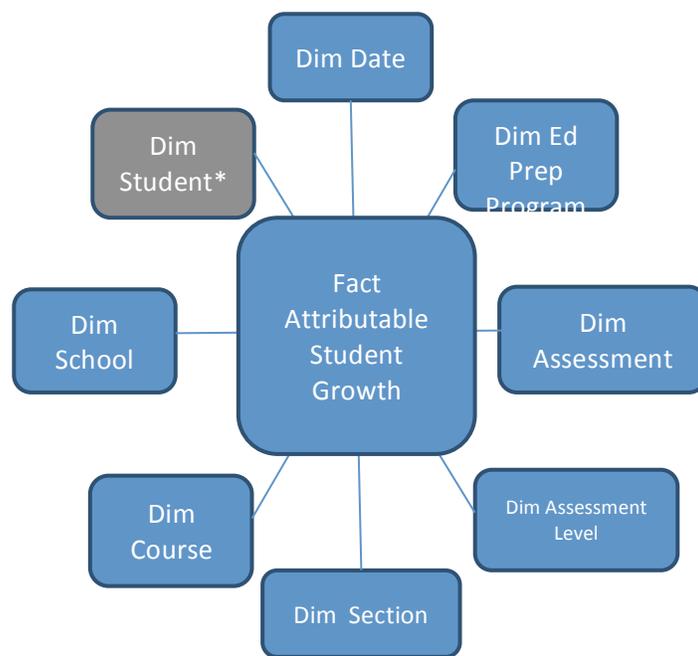
This example star schema, like the source system, is organized by a person’s role (student, staff) in the context of a course section, i.e., the student enrolled in a course and the staff member assigned to a course. (The figure assumes one growth or value-add methodology is used, but adding a “Dim Growth Model” table could allow for growth to be calculated in multiple ways and compared, as long as the system is configured and/or users trained to avoid invalid comparisons.)

Note: The star schema is an effective model for analytics within a relational database management system due to its usability, scalability, and performance. The performance is gained due to the reduced

number of join operations that the relational database management systems must execute, and because the dimension tables are kept “wide” but “shallow,” while the fact tables are “narrow” but “deep.” Fact tables may contain millions or billions of rows but only contain numeric measures and keys (narrow). Dimension tables contain fewer rows (shallow) with a rich set of descriptive labels (wide). Non-relational database technologies accomplish performance gains for analytics using other methods.

In the above example, we can attribute student growth to a teacher, a course section taught by one or more teachers, to a course, or to a school. What if instead we want to look for trends in student growth based on the educator preparation program from which a teacher received training? The primary teacher prep program could be an attribute of the Staff dimension, but another approach is to use postsecondary data. (Recognizing that CEDS crosses P20-W data domains.)

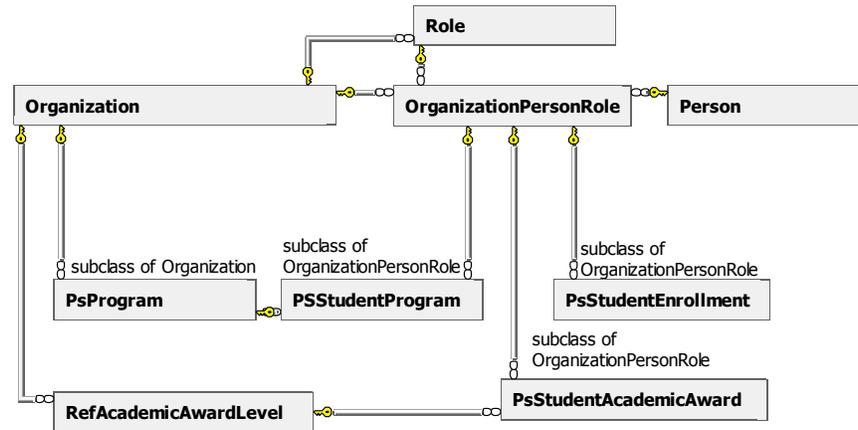
Since a teacher may have multiple degrees from multiple institutions, all a part of their teacher preparation experience, the star schema could be redesigned with a *Dim Educator Prep Program*. (This could get more complicated if we want to optimize analysis of questions that involve the timing or level of participation vs. completion for each educator to each prep program. For this example, however, we will limit it to a simply the educator prep program(s) *completed* by the teachers assigned to a course section.)



**A best practice for data warehouse design is to use the most atomic level of data available. In this case, the grain is a record in Fact table for every student growth metric that can be associated with a course section. The end user of the system may not have the option of seeing student-level results, but the student-level detail needs to be in the Fact table so as to support flexibility of rolling up the data along the other dimensions.*

To complete the example, we will show how CEDS elements that relate to postsecondary teacher preparation programs might be transformed from the CEDS NDS to the Dim Ed Prep Program table. The

following illustration shows the CEDS NDS tables that might be needed to populate the Dim Ed Prep Program table.



The table below shows some of the information that might be needed to populate Dim Ed Prep Program and the source elements as defined in the CEDS NDS.

Source Table	Source Column	Destination Column
Organization (PsInstitution)	Name	Institution Name
OrganizationIdentifier (PsInstitution)	Identifier (selected by RefOrganizationIdentificationSystemId)	IPEDS Identifier
Organization (PsProgram)	Name	Program Name
PsProgram	RefCIPCodeId (using Ref table to lookup the code)	CIP Code
PsStudentAcademicAward	RefAcademicAwardLevelId	Academic Award Level
Source Table	Source Column	Destination Column
Organization (PsInstitution)	Name	InstitutionName
OrganizationIdentifier (PsInstitution)	Identifier (selected by RefOrganizationIdentificationSystemId)	IPEDSIdentifier
Organization (PsProgram)	Name	ProgramName
PsProgram	RefCIPCodeId (using Ref table to lookup the code)	CIPCode
PsStudentAcademicAward	RefAcademicAwardLevelId	AcademicAwardLevel

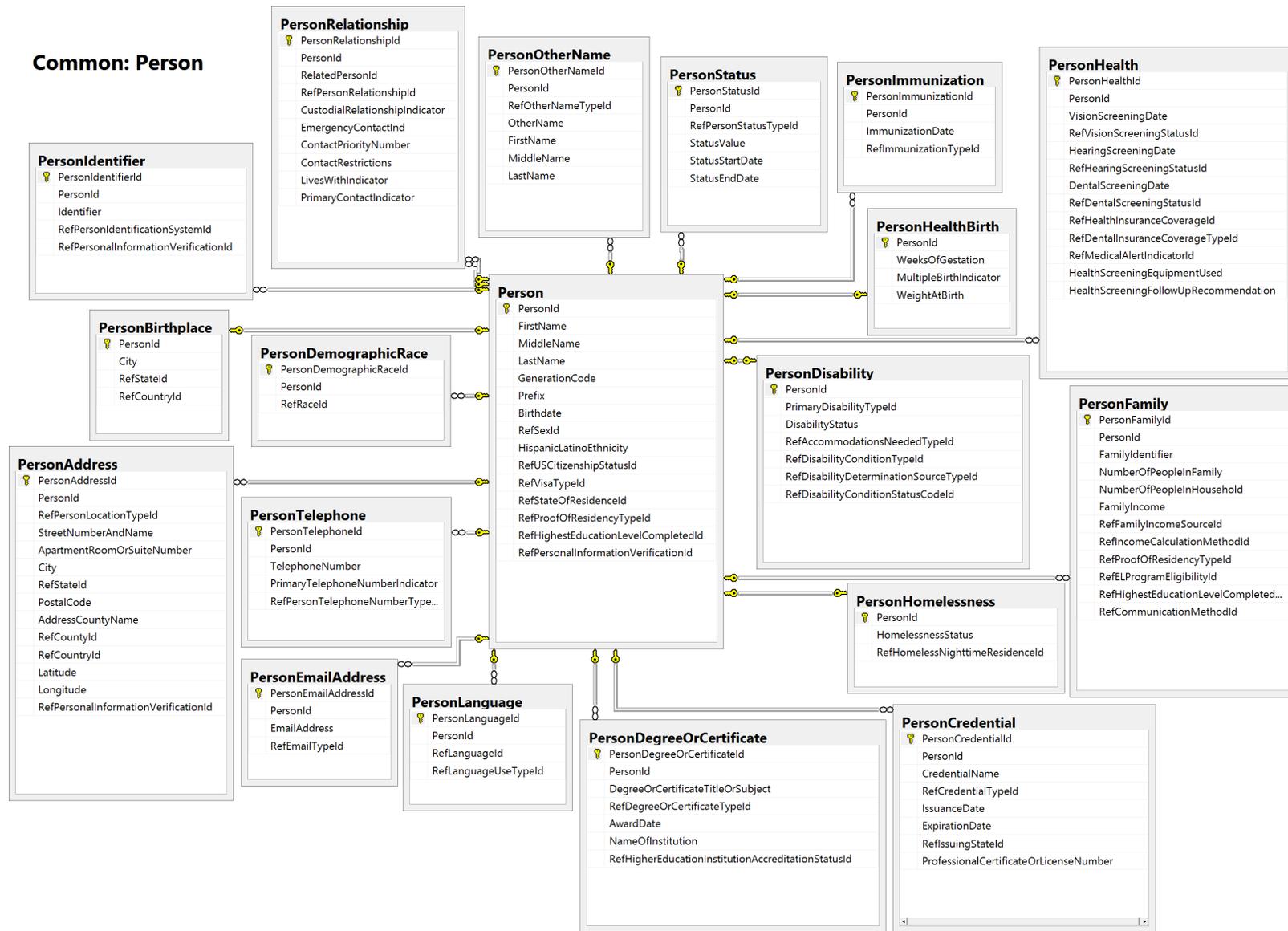
For this transformation, we first need the data that links the Person assigned as Teacher Of Record for a Course Section to their educator prep program, and then we can get the data we need about the organizational attributes of the program and institution. The transformation rules may include filters such as only populating the table when the Postsecondary Program is for specific CIPCodes (Classification of Instructional Program Code).

APPENDIX A: NDS ENTITY RELATIONSHIP DIAGRAMS

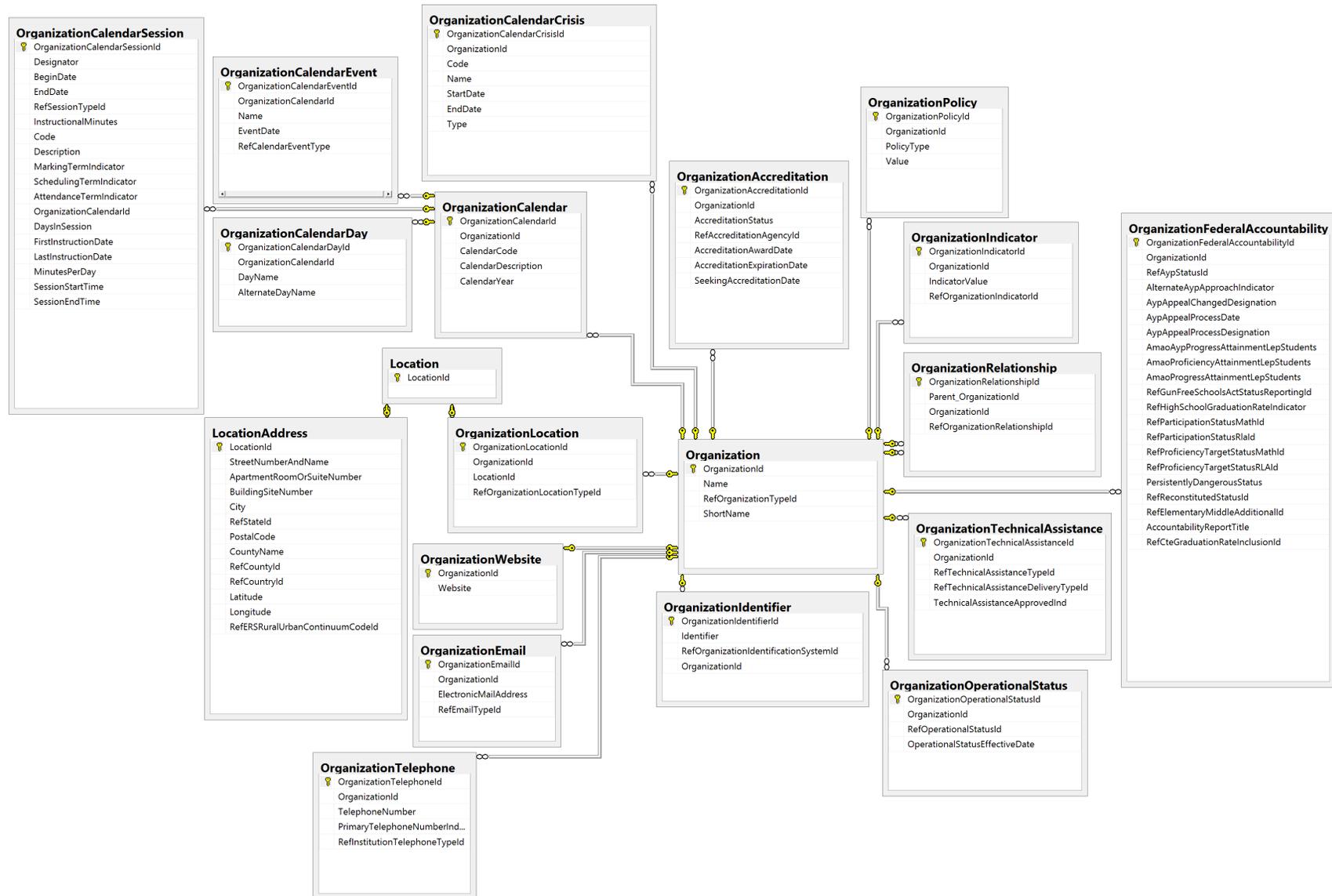
The following entity relationships diagrams (ERD) provide visual representations of the CEDS Normalized Data Schema (NDS) organized by the high-level concepts of people, organization, roles/relationships between people and organizations, and by the Domains of Early Learning, K12, Postsecondary, Assessments, and Learning Standards.

(Updates in version 4 reflect expansion of the models in each domain, as well as better coordination across domains based on the work of the CEDS P20-W Stakeholders Group. Version 4 also introduces new models to show the expanded scope in areas that cross domains, including Professional Development, Rubrics, and Financial Reporting.)

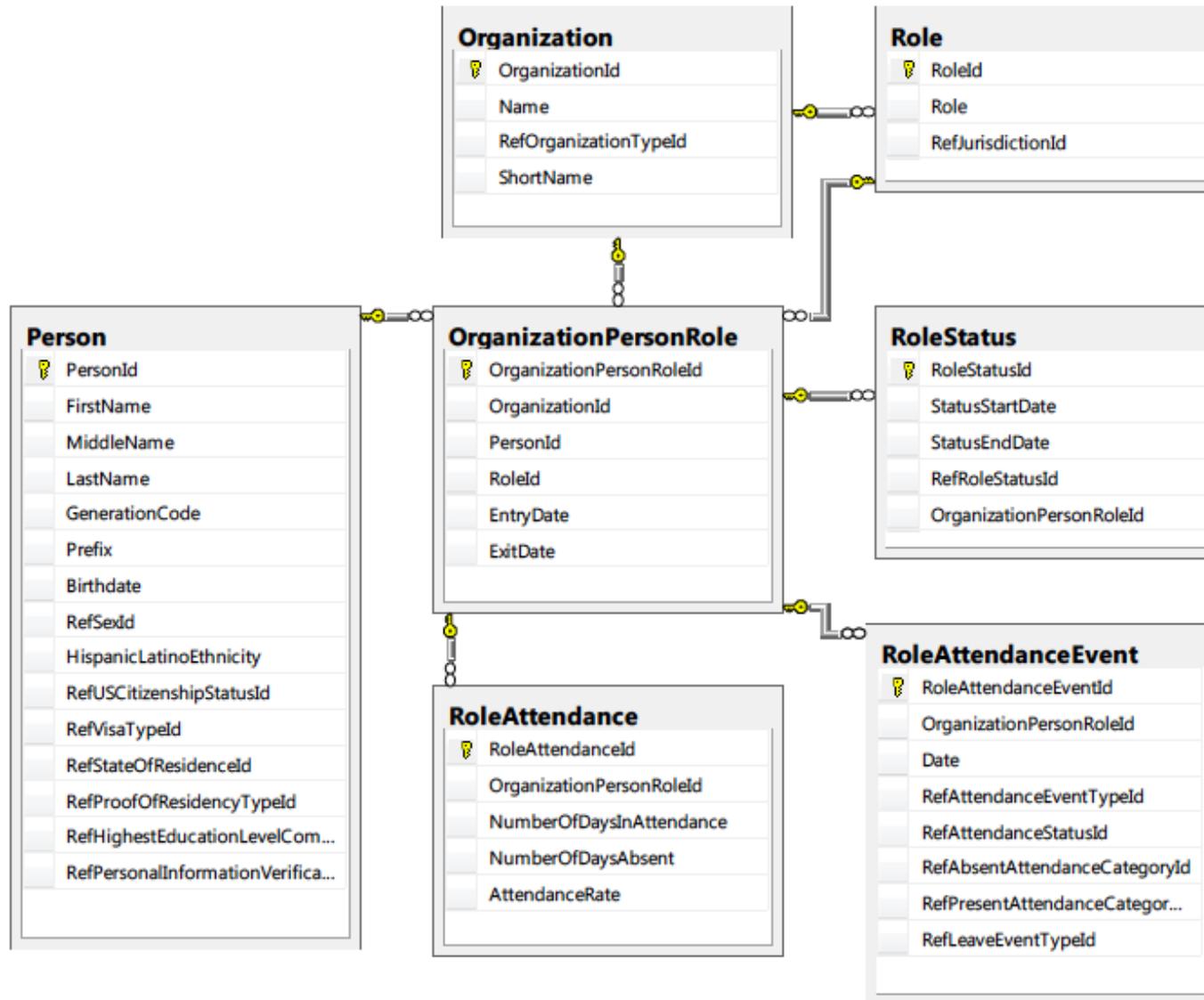
Common: Person



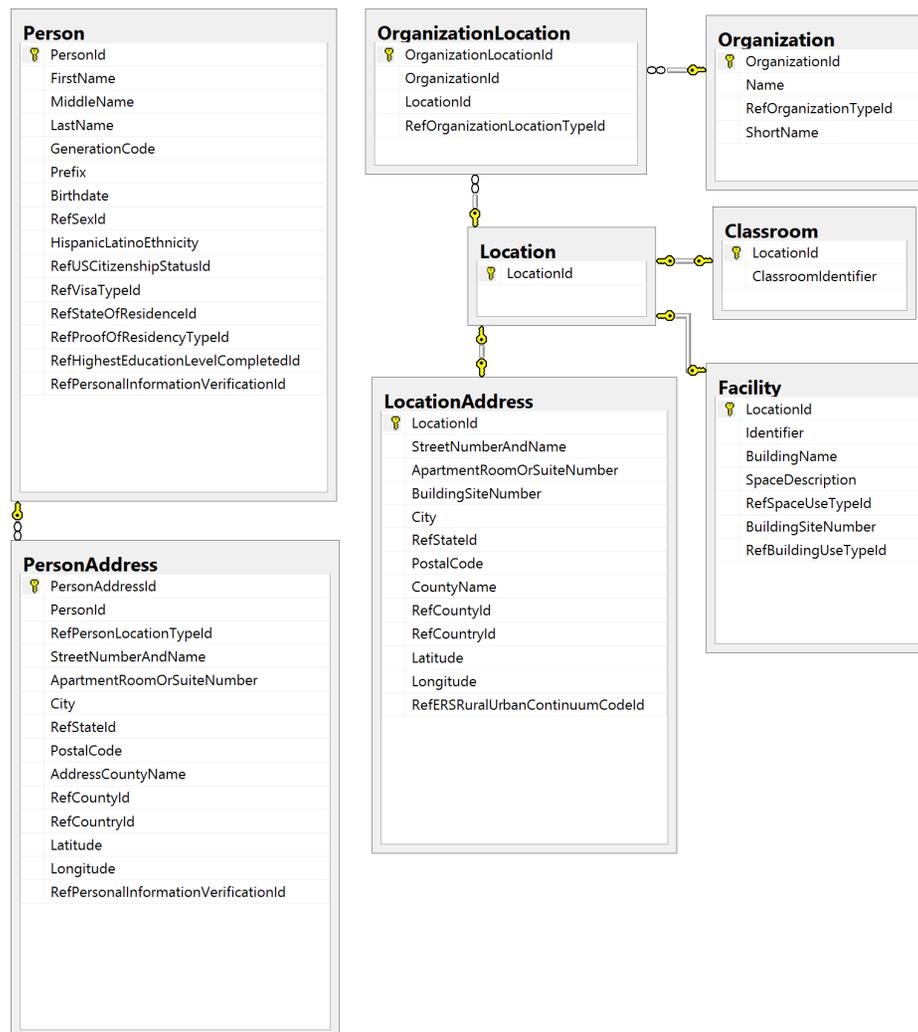
Common: Organization



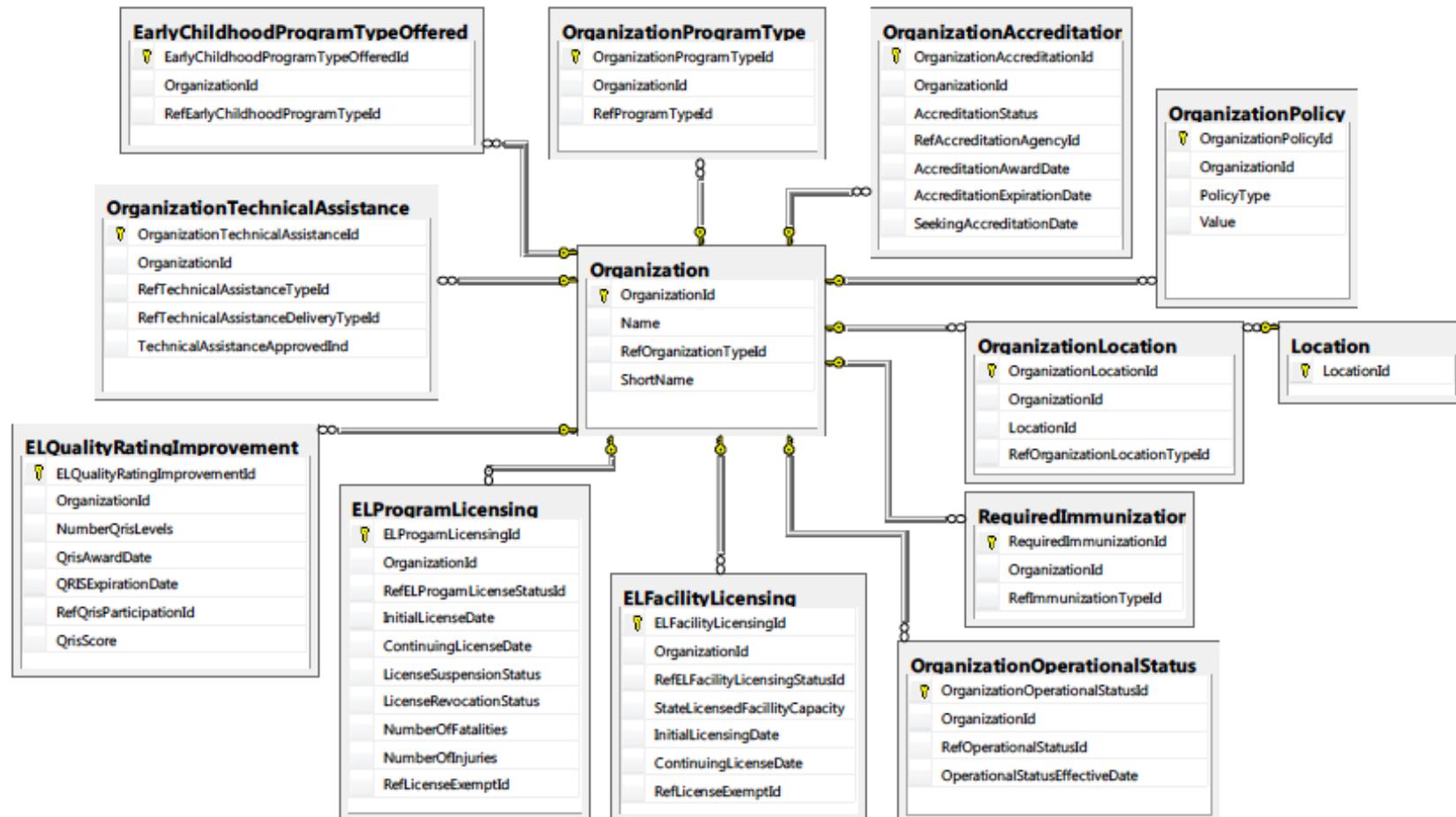
Common: Role



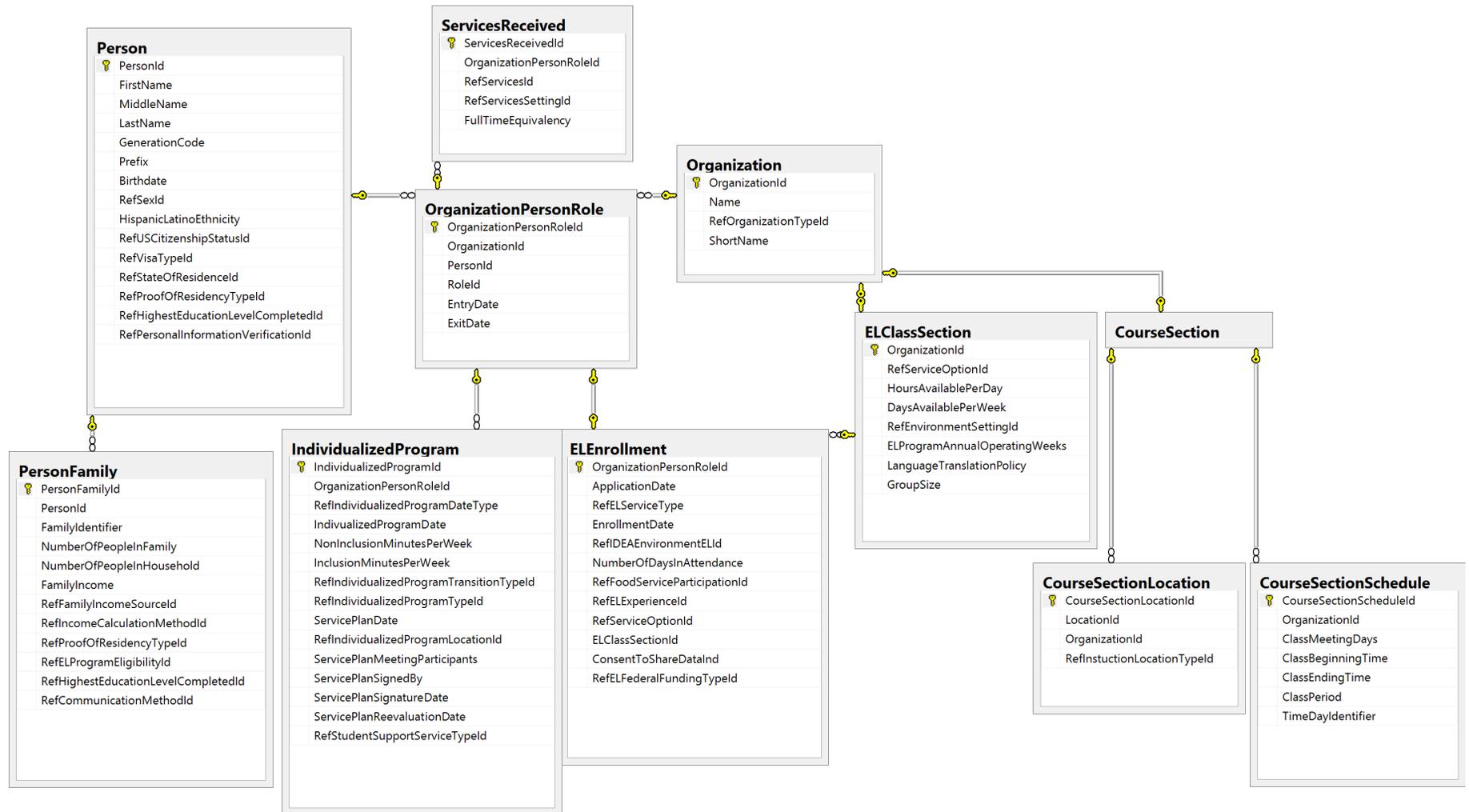
Common: Location



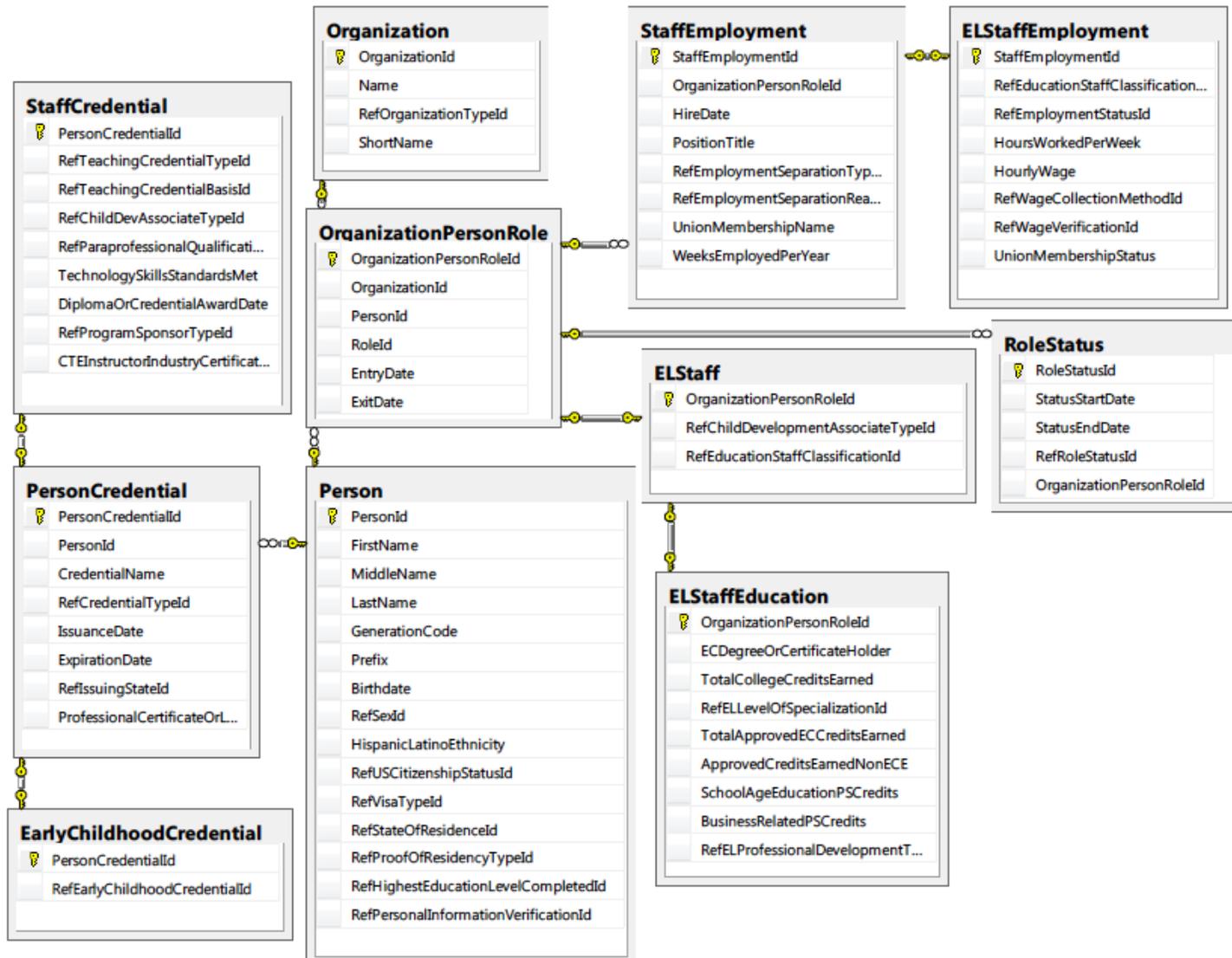
Early Learning: Organization



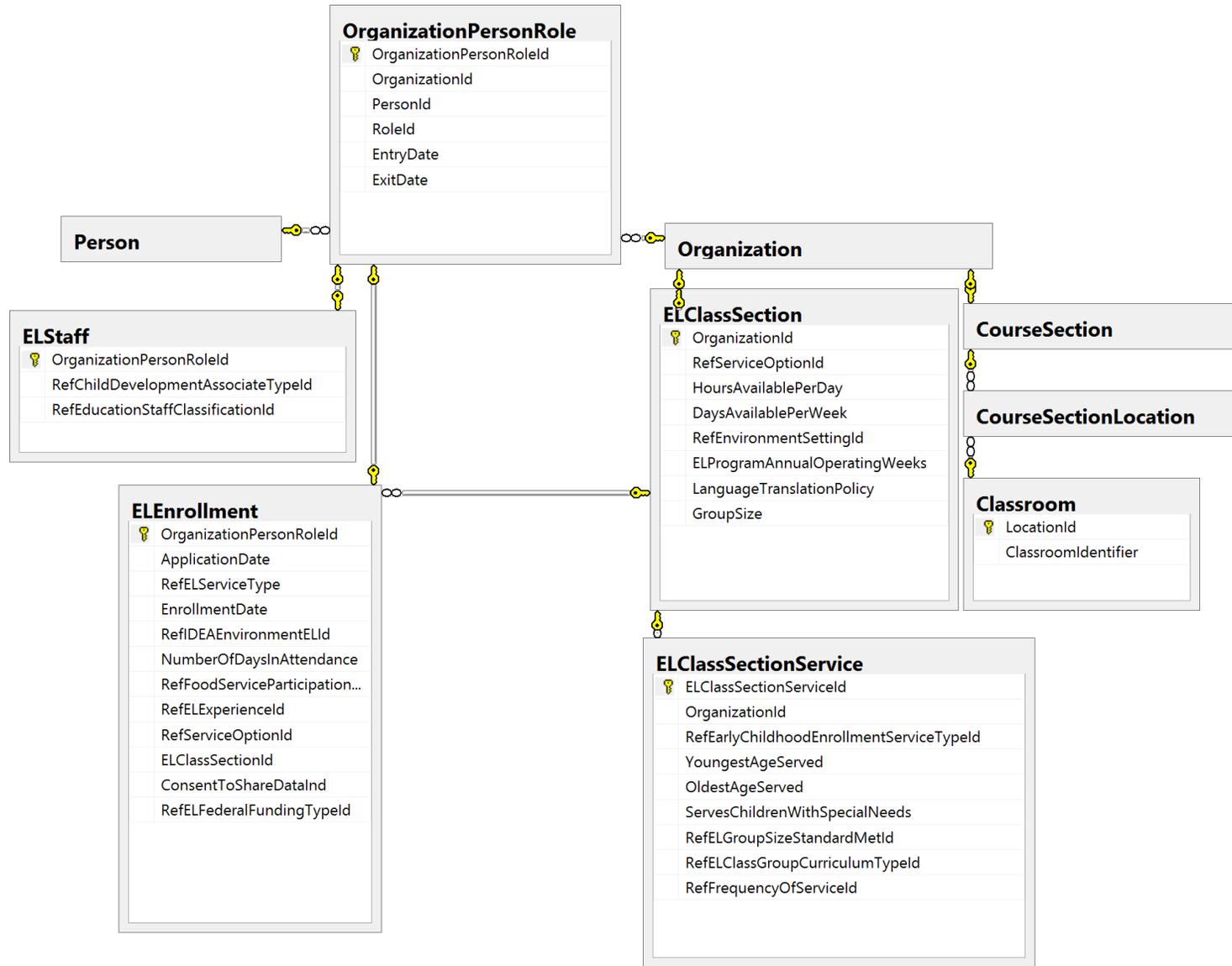
Early Learning: Participation



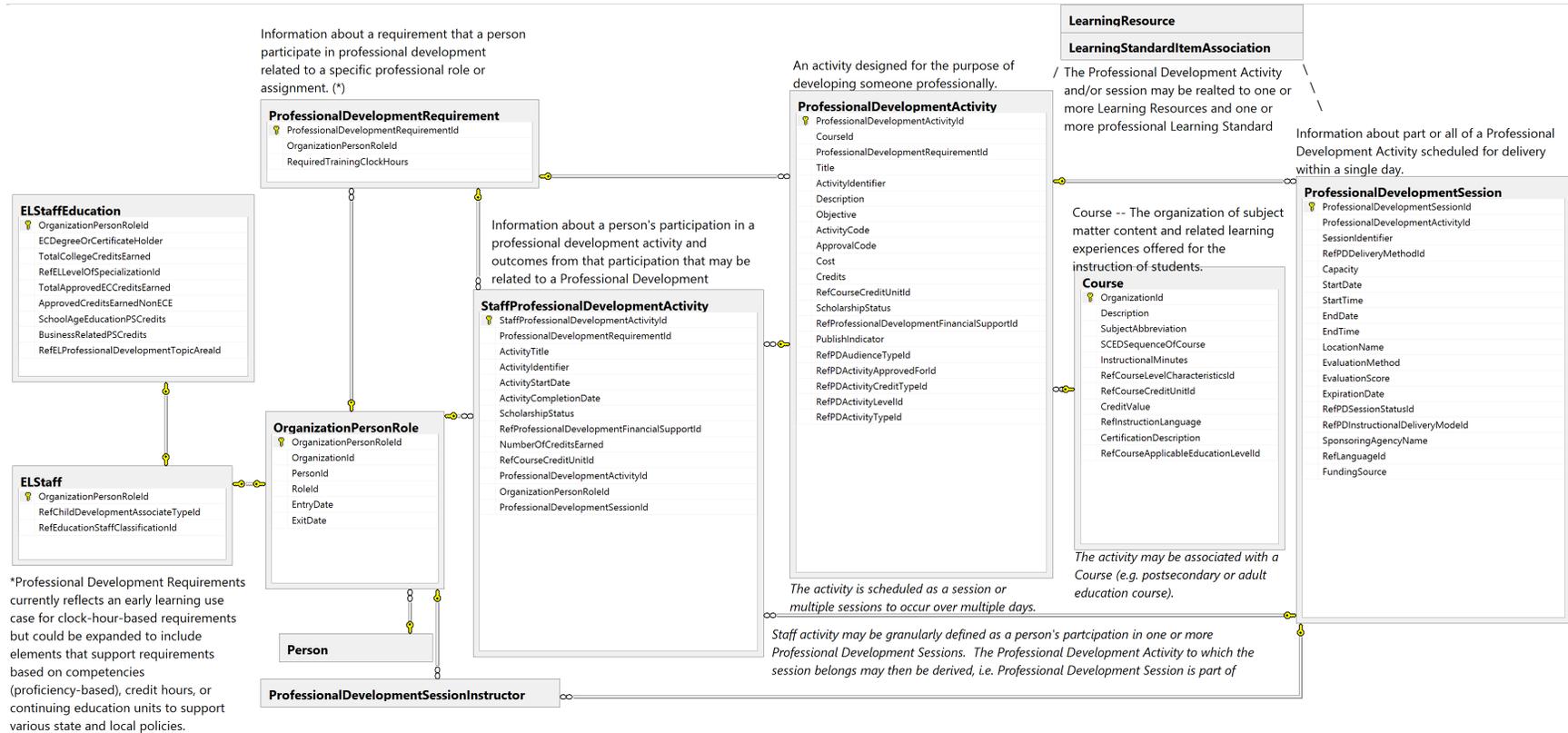
Early Learning: Staff



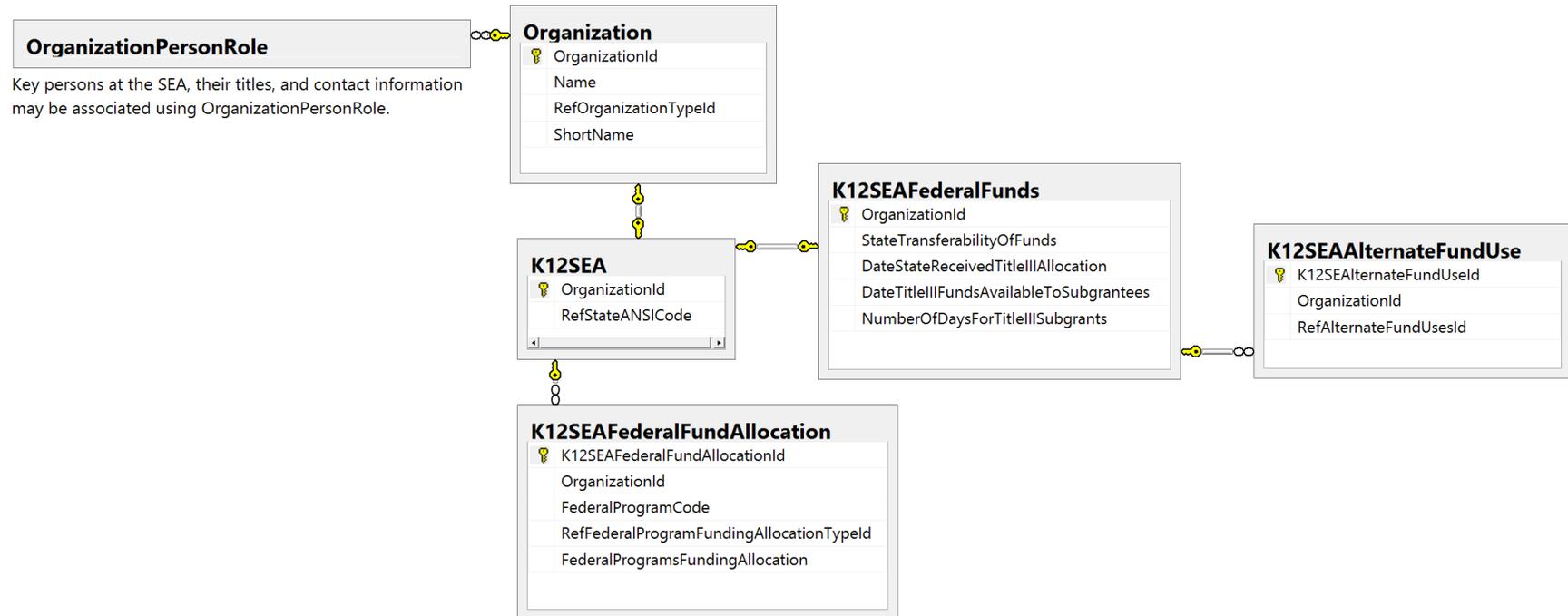
Early Learning: Class Group



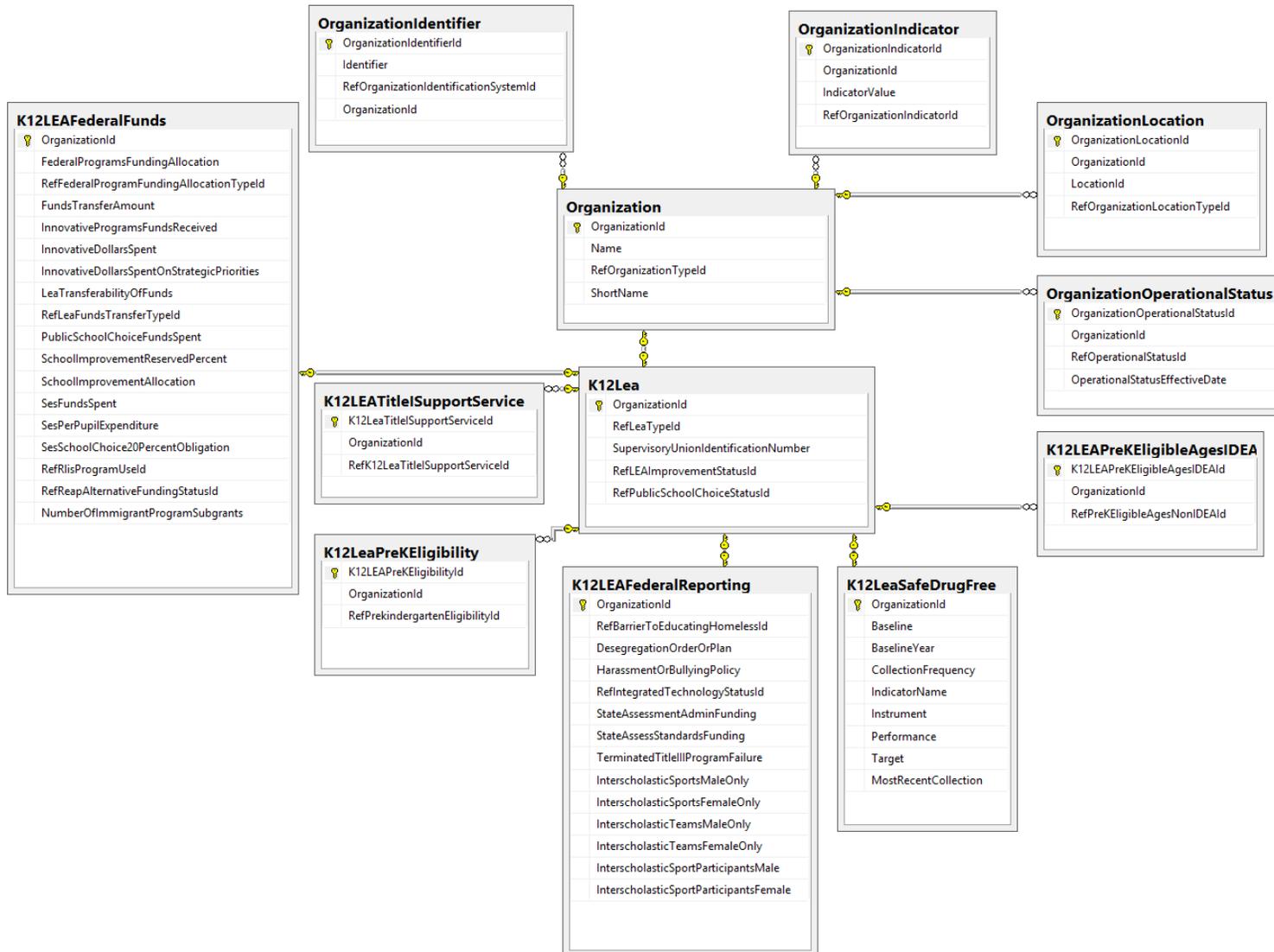
Early Learning: Professional Development



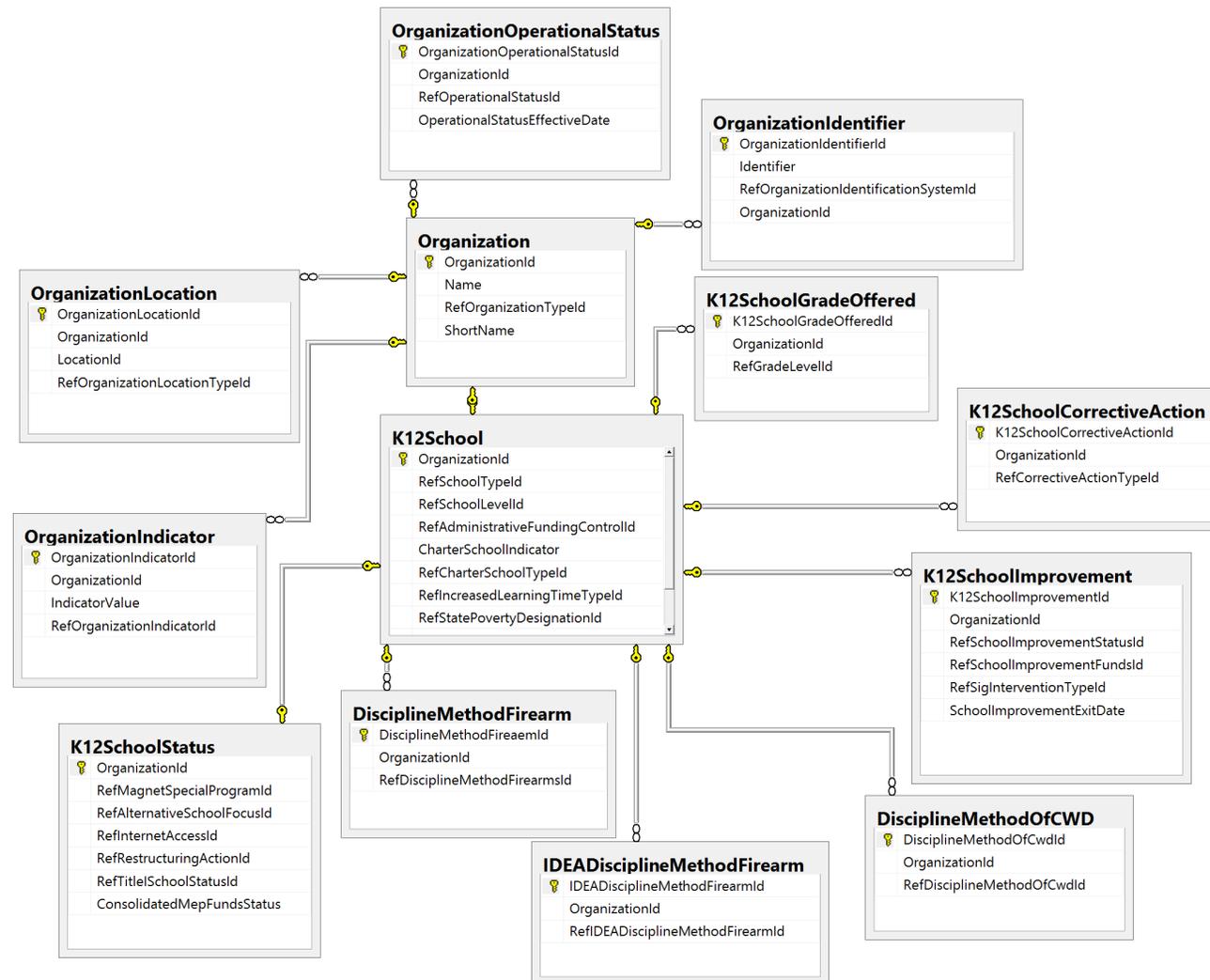
K12: SEA



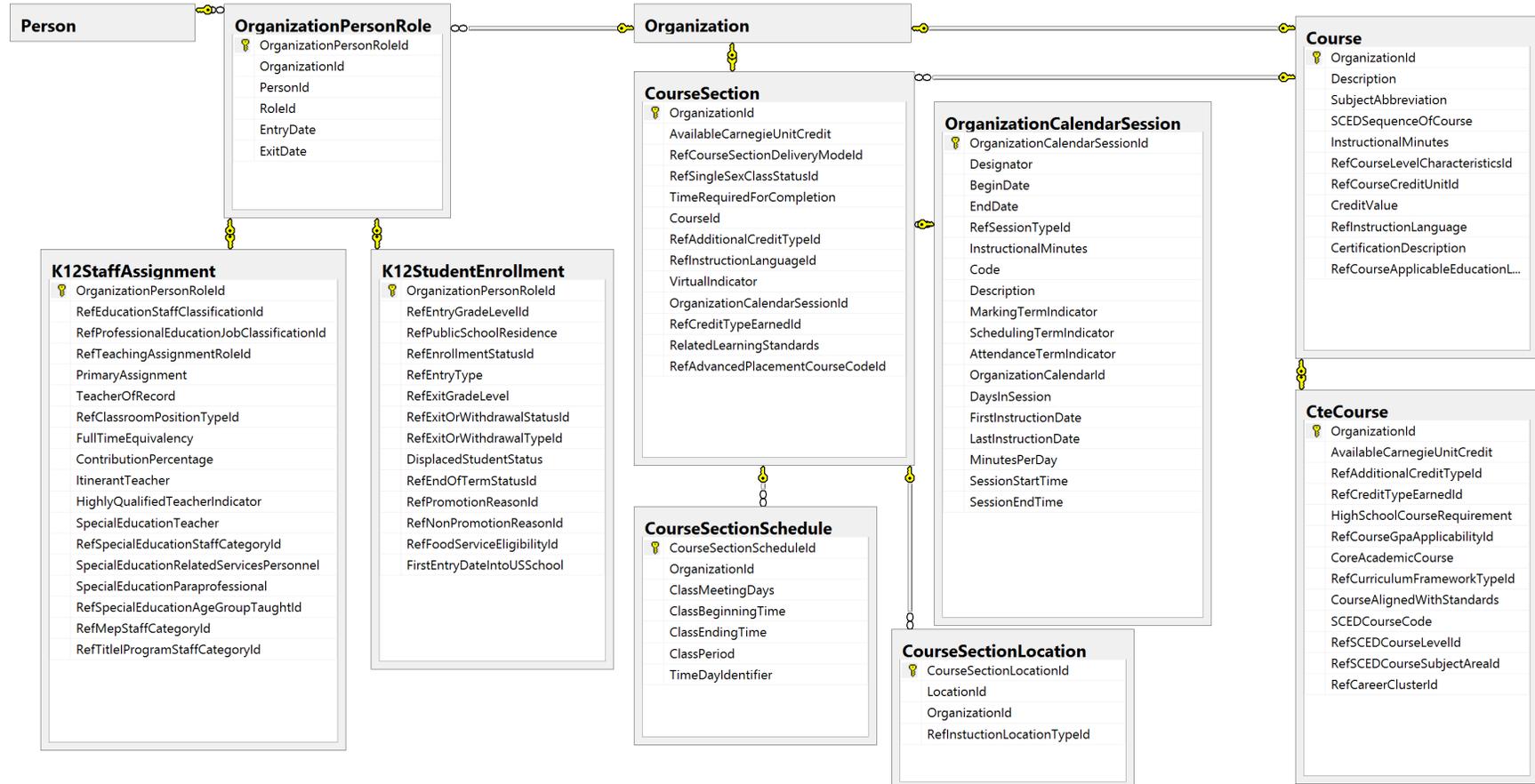
K12: LEA



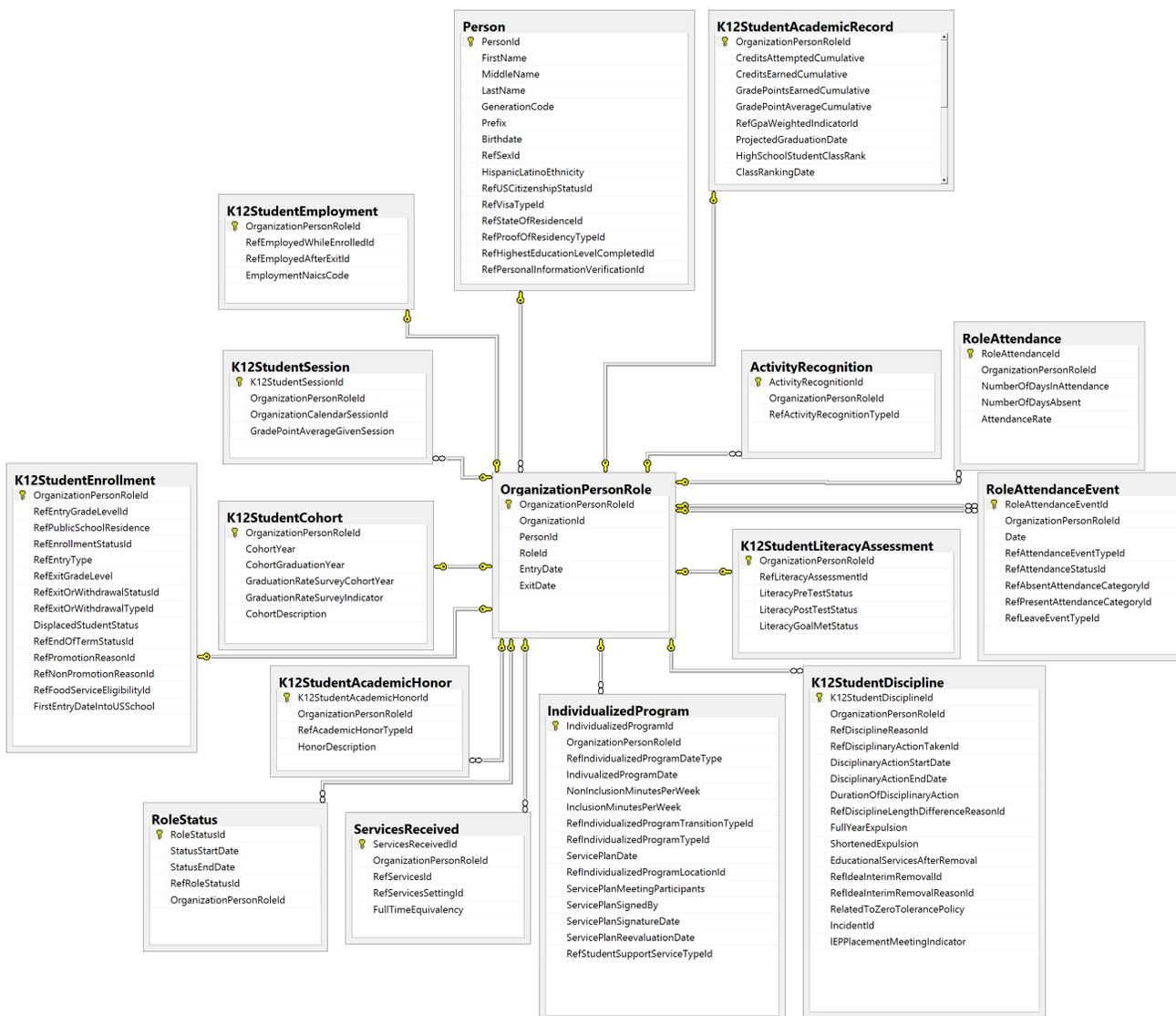
K12: School



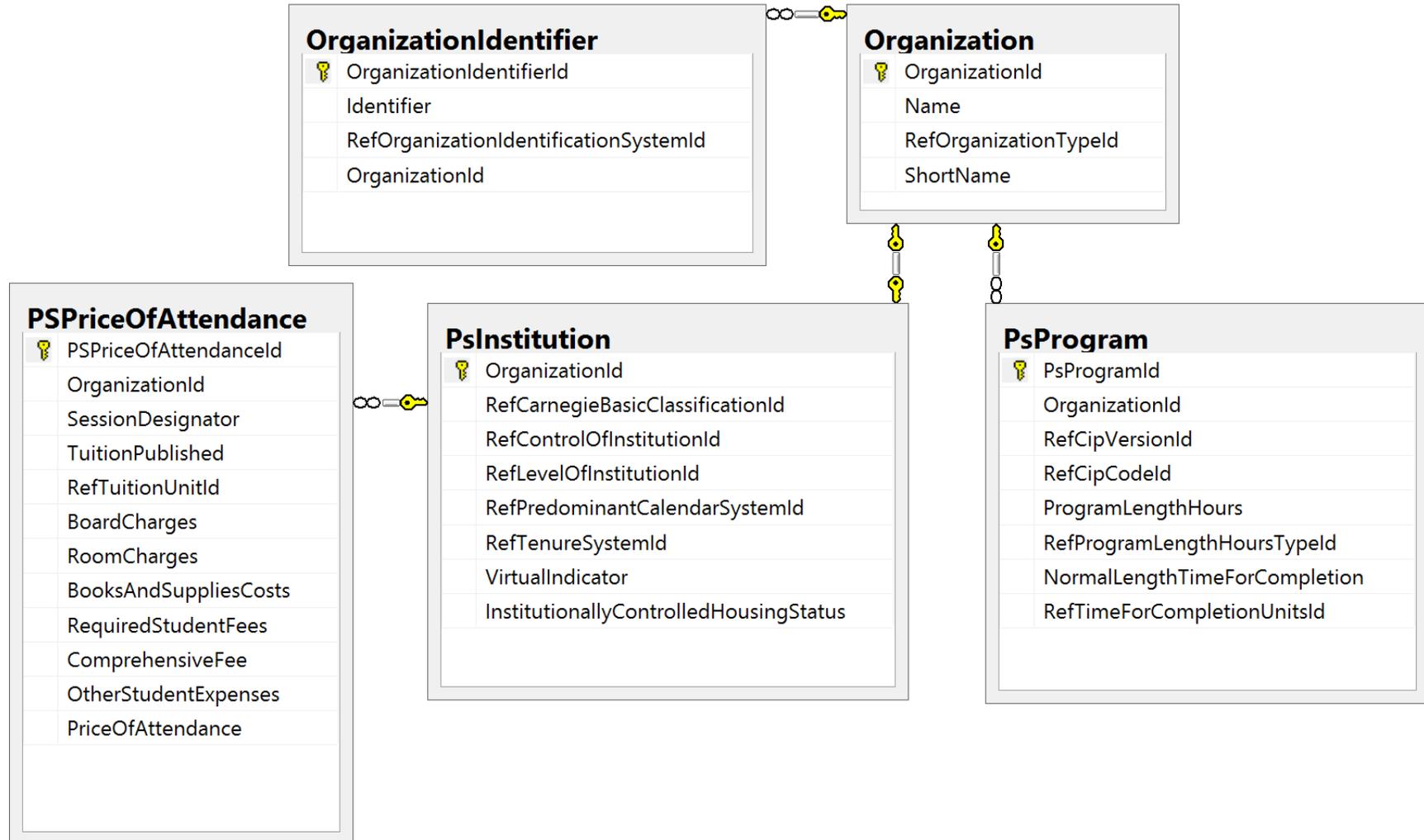
K12: Course Section



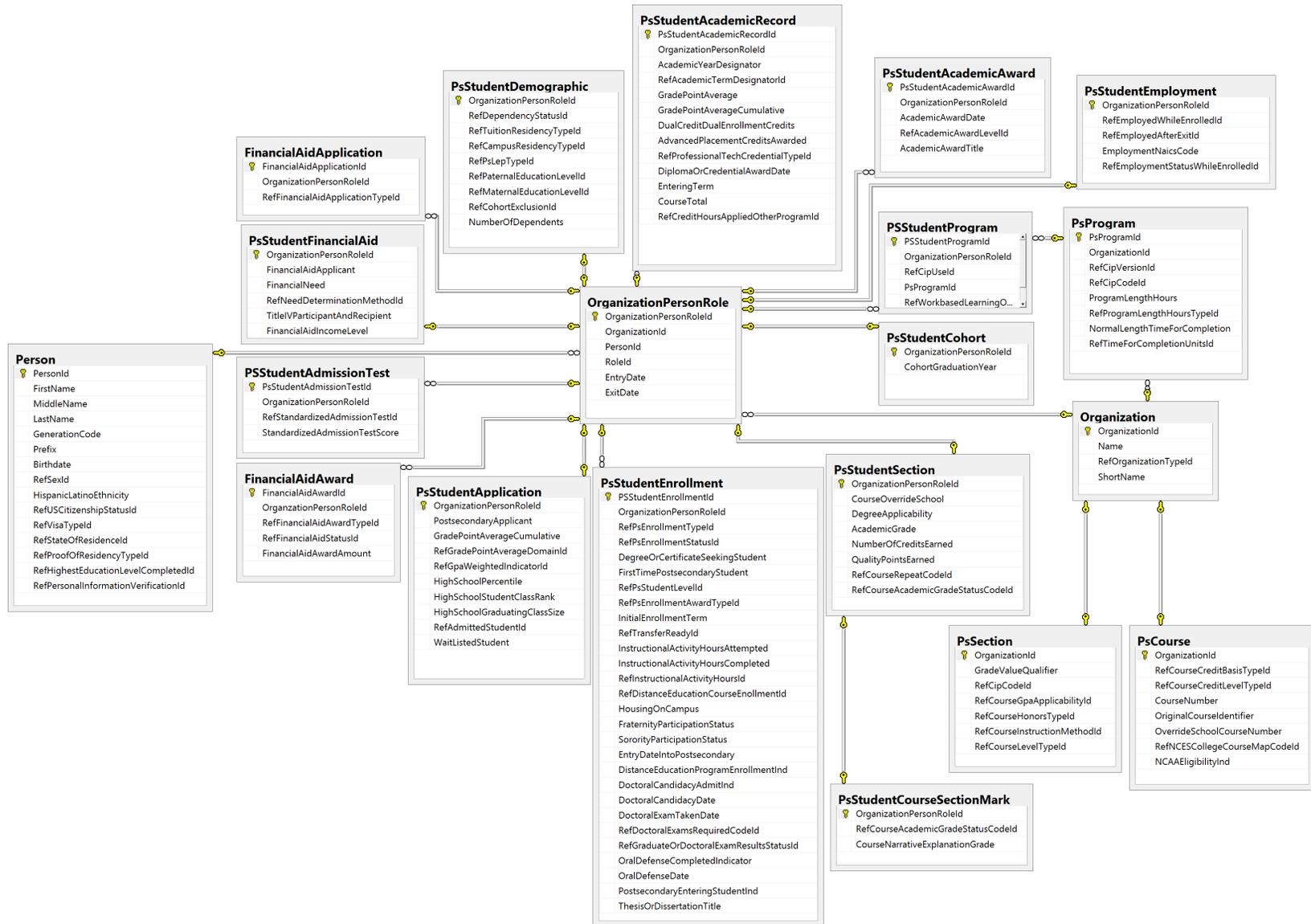
K12: Student



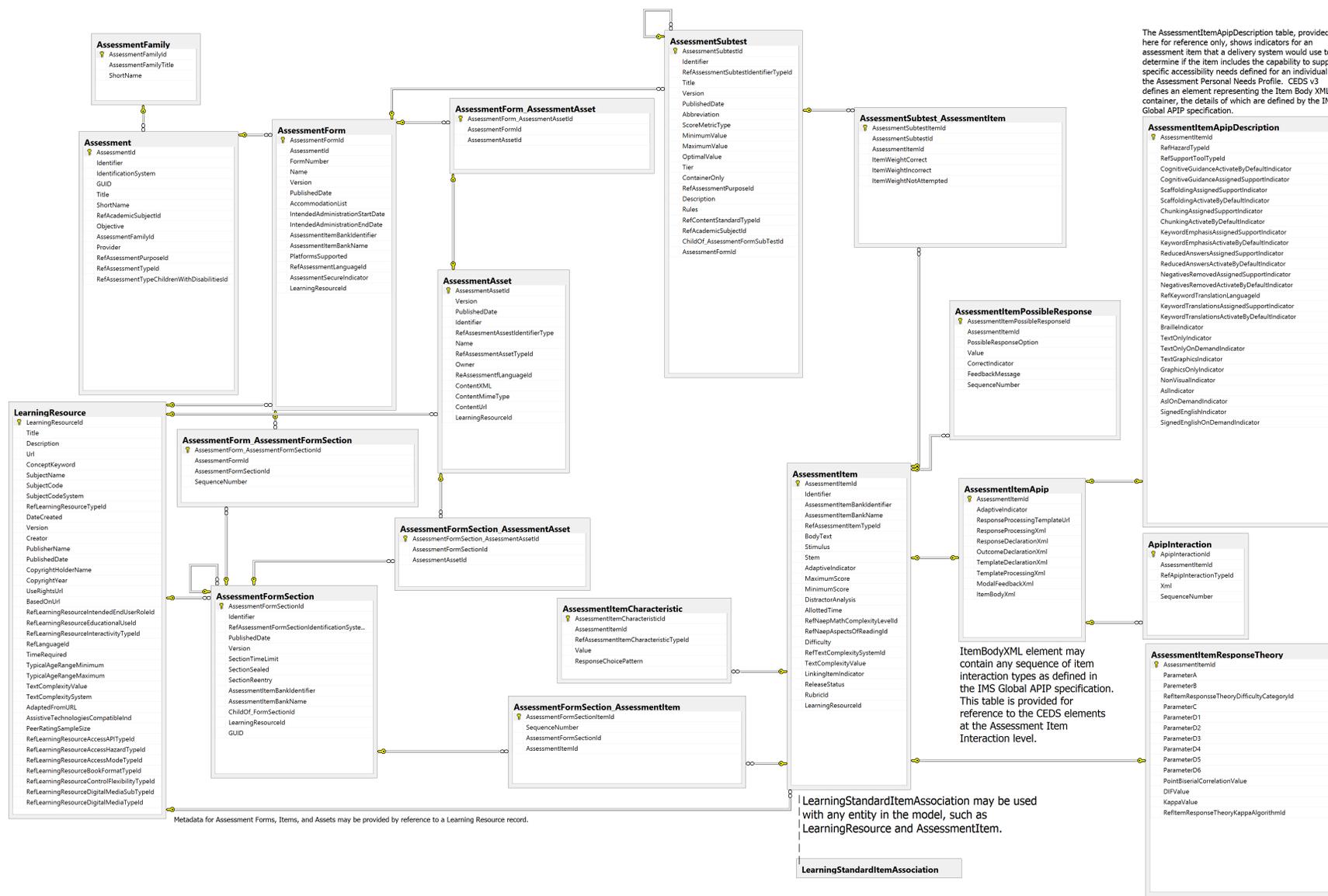
Postsecondary: Institution



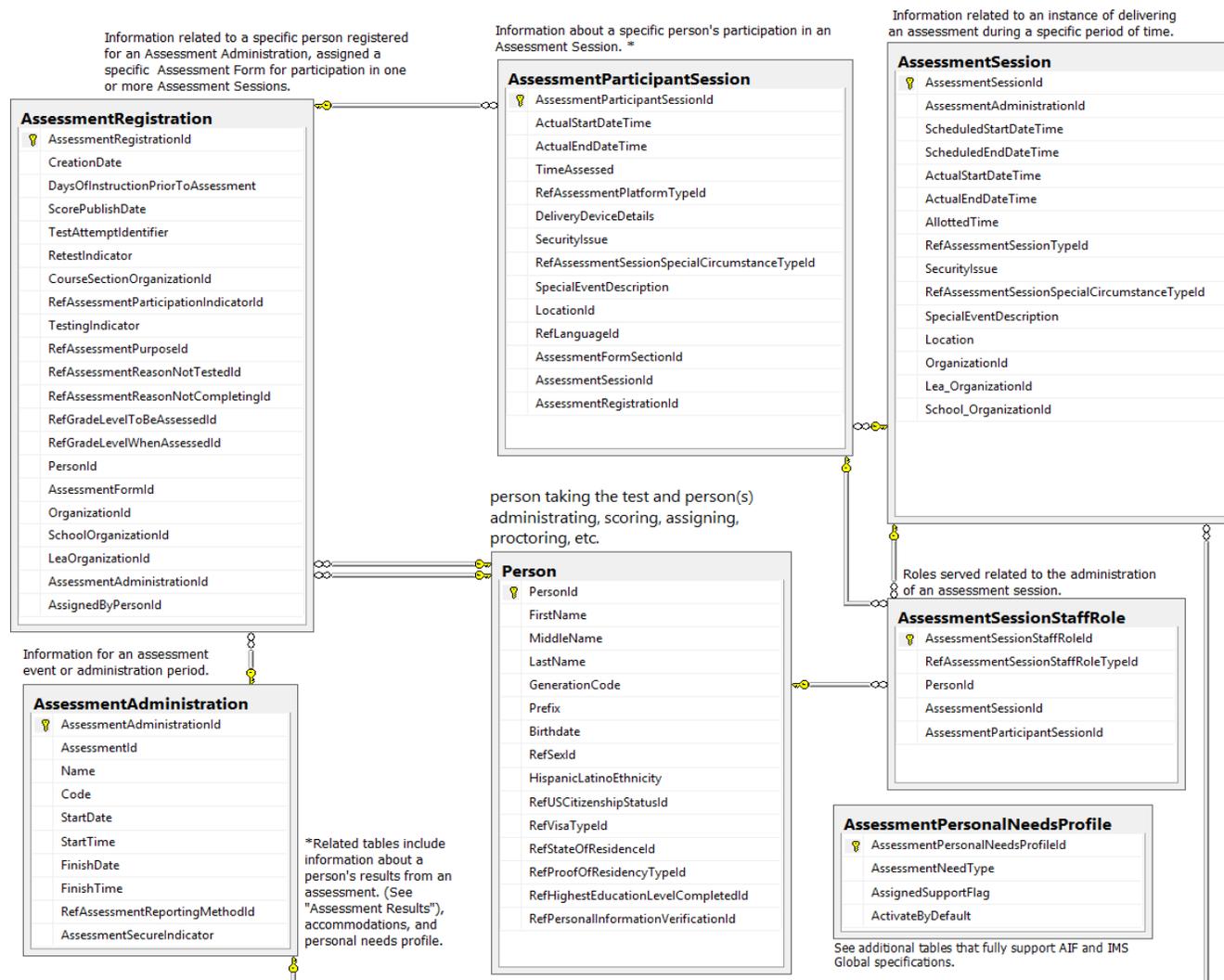
Postsecondary: Student



Assessment: Design



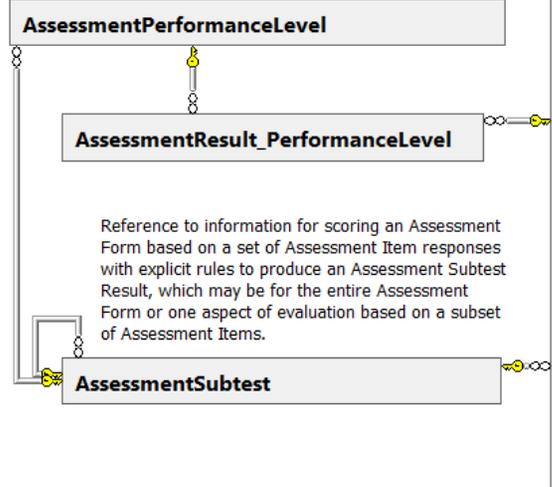
Assessment: Delivery



Assessment: Results

Reference to information about the performance levels that may be assigned to an Assessment Subtest Result and specifications for selecting the performance level based on a score. Four styles are supported:

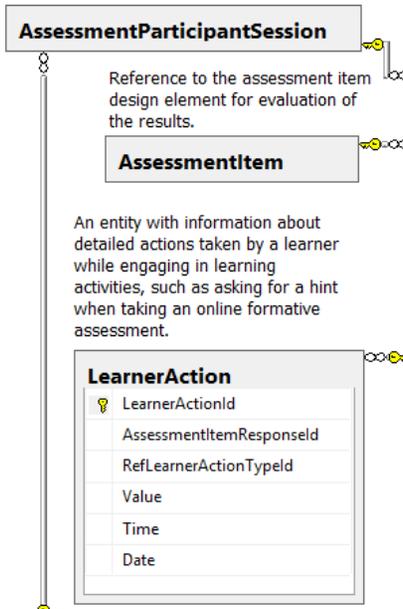
- 1) Specification of performance level by lower and upper cut score
- 2) Specification of performance level by lower cut score only
- 3) Specification of performance level without any mapping to scores
- 4) Specification of performance level by mapping to other scores



An entity that includes information about a person's results from an assessment which may be for the entire assessment or one aspect of evaluation. The scoring method is defined by the related Assessment Subtest. The entity includes the score value and information about the score, such as a diagnostic statement.

AssessmentResult	
AssessmentResultId	
ScoreValue	
RefScoreMetricTypeId	
PreliminaryIndicator	
RefAssessmentPretestOutcomeId	
NumberOfResponses	
DiagnosticStatement	
DiagnosticStatementSource	
DescriptiveFeedback	
DescriptiveFeedbackSource	
InstructionalRecommendation	
IncludedInAypCalculation	
DateUpdated	
DateCreated	
AssessmentFormSubtestId	
AssessmentRegistrationId	
RefELOOutcomeMeasurementLevelId	
RefOutcomeTimePointId	

Reference to delivery data for evaluation of results.



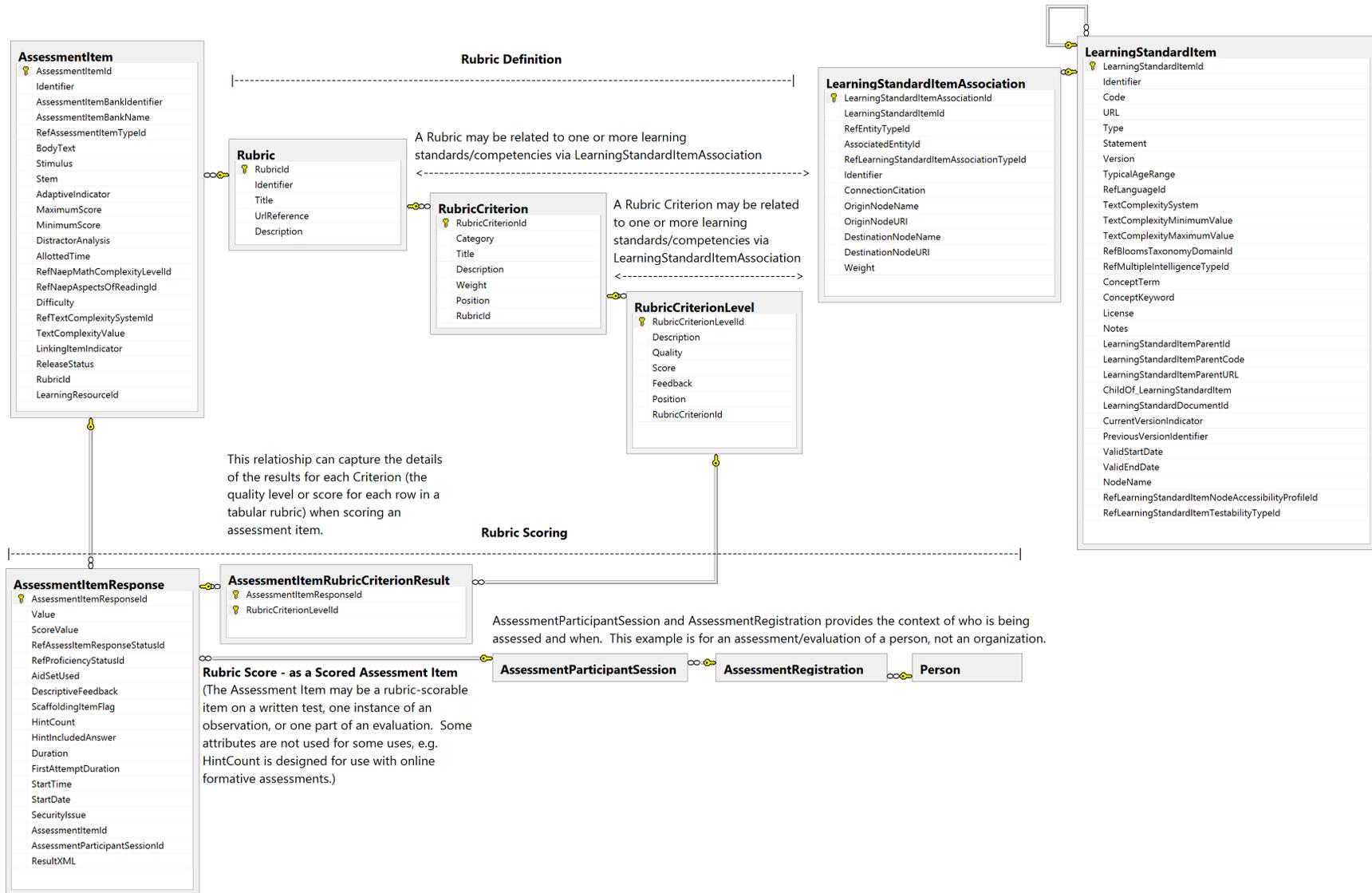
An entity with information related to a specific response to an assessment item by the person being assessed. The entity includes the response, a score or indication that the response was correct or incorrect, and other information such as response time.

AssessmentItemResponse	
AssessmentItemResponseId	
Value	
ScoreValue	
RefAssessmentItemResponseStatusId	
RefProficiencyStatusId	
AidSetUsed	
DescriptiveFeedback	
ScaffoldingItemFlag	
HintCount	
HintIncludedAnswer	
Duration	
FirstAttemptDuration	
StartTime	
StartDate	
SecurityIssue	
AssessmentItemId	
AssessmentParticipantSessionId	
ResultXML	

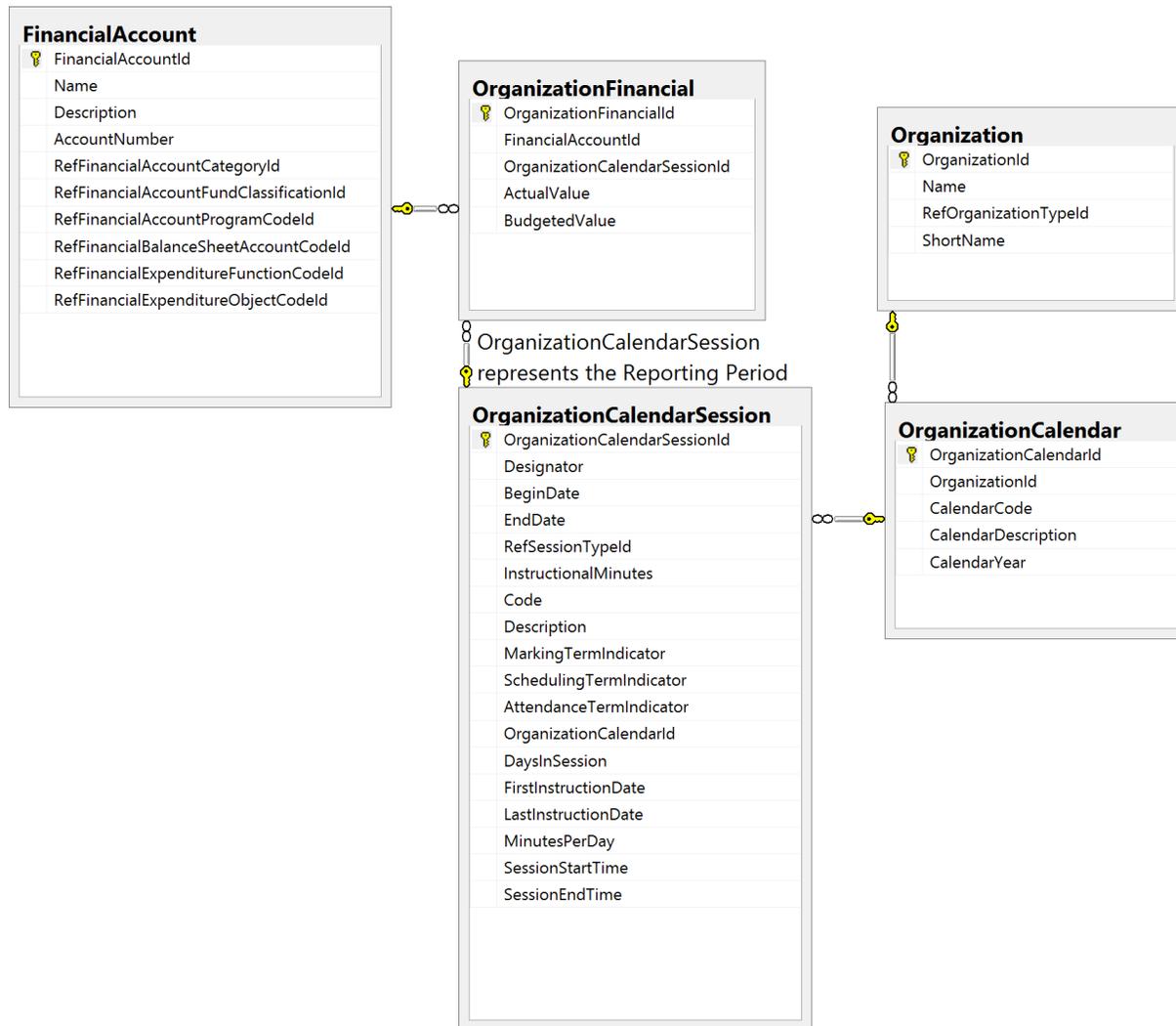
AssessmentRegistration	
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Results are linked via Assessment Registration and by reference to other assessment delivery information.

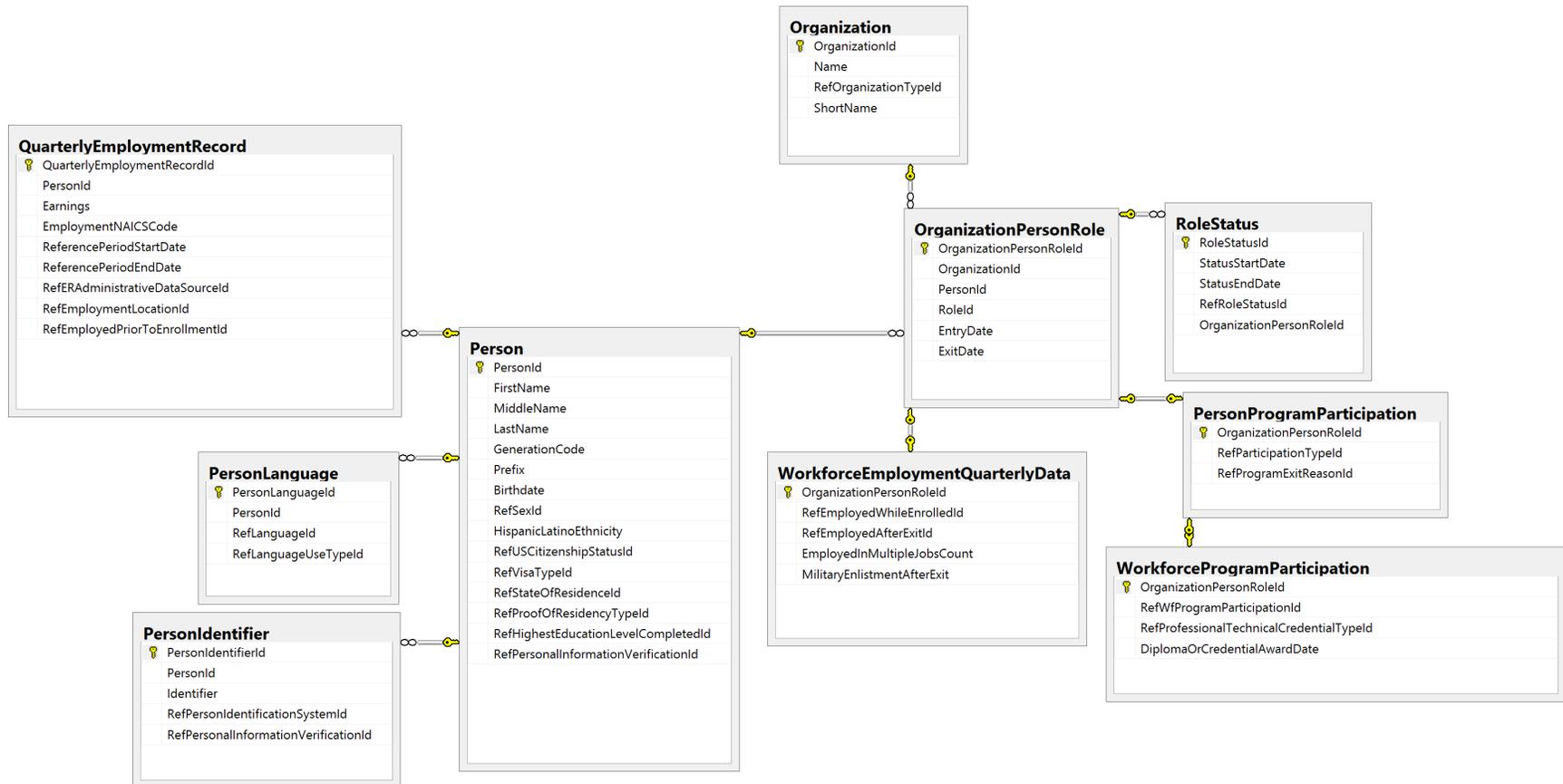
Rubrics



Financial Reporting



Workforce



APPENDIX B: NORMALIZED DATA SCHEMA (NDS) TABLES

The following section lists the tables defined in the Normalized Data Schema (NDS).

Note: Due to normalization, some CEDS elements are not represented as distinct fields/columns in the NDS. However, every CEDS element is represented in the NDS model. For example, the CEDS element “Exit or Withdrawal Type” used with student enrollment records has been “normalized out” of the NDS model. Instead, the tables RoleStatus and RefRoleStatus provide a generic way of attributing any number of status or reason categories to an enrollment event for things like “Exit or Withdrawal Type” and “Entry Type”.

There are also some “fields” in the NDS such as surrogate keys and some date fields that serve purposes specific to the model and do not map back to any CEDS elements. Reference tables in the NDS often reflect one or more options sets defined for CEDS elements, i.e. reference table fields may map to CEDS element metadata rather than to elements.

See the accompanying spreadsheet document for detailed column-level definitions.

NDS Tables

The following table lists all tables in the NDS model with a description used in developing the model. Descriptions correspond to CEDS entity definitions in the DES model when applicable. Tables prefixed with “Ref” are reference tables designed to store the option set for a specific CEDS element. The description for a Ref table is from the corresponding CEDS Element definition.

Table	Description
Achievement	An achievement earned by a learner upon fulfilling a specified criteria, which may be defined by a related a Competency Set.
AchievementEvidence	A statement or reference describing the evidence that the learner met the criteria for attainment of the achievement. [CEDS Element: Achievement Evidence Statement, ID:000901]

ActivityRecognition	Recognition given to the student for accomplishments in a co-curricular, or extra-curricular activity. [CEDS Element: Recognition for Participation or Performance in an Activity, ID:000229]
AeCourse	The organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester or two-week workshop) to an individual or group of students (e.g., a class).
AeProvider	Information on an adult education provider organization.
AeStaff	Adult education staff information.
AeStudentAcademicRecord	Adult education student's academic information attributes.
AeStudentEmployment	Employment information for an adult education student.
ApiInteraction	Accessible portable item protocol interaction.
Application	A data system or application.
Assessment	An instrument used to evaluate a person with at least one form, section, and Assessment Item. (A summative assessment typically addresses a particular level, subject, and date range. A person's individual responses during the summative assessment administration are evaluated then the results are scored using one or more Assessment Sub Test Scoring Rules.)
Assessment_AssessmentAdministration	The association of an Assessment to an instance of Assessment Administration.
AssessmentAdministration	Information related to an assessment event or administration period. It includes information related to the time period of administration, and place(s) of administration .
AssessmentAdministration_Organization	Association of an Assessment Administration to one or more Organizations.

AssessmentAsset	Content used to compose an assessment item, is referenced by an item but not part of the item content itself, or is content that is included as part of a section within an assessment form. Assets can be static content such as artwork or dynamic assets such as calculators or other tools.
AssessmentFamily	A set of assessments with a common name, jurisdiction, or focus (e.g. SAT, GRE, NAEP).
AssessmentForm	An instance of an assessment that can equate scores with another instance of that same assessment.
AssessmentForm_AssessmentAsset	The association of an Assessment Form to an Assessment Asset.
AssessmentForm_AssessmentFormSection	The association of an AssessmentForm to one or many AssessmentFormSections.
AssessmentFormSection	A section for an Assessment Form.
AssessmentFormSection_AssessmentAsset	The association of an Assessment Form Section to an Assessment Asset.
AssessmentFormSection_AssessmentItem	The association of an Assessment Item to an Assessment Form Section.
AssessmentItem	A specific prompt, that defines a question or protocol for a measurable activity that triggers a response from a person used to determine whether the person has mastered a learning objective.
AssessmentItemApip	The templates, processing and declaration data for an assessment item APIP.
AssessmentItemApipDescription	
AssessmentItemCharacteristic	The type and value for a psychometric measure.
AssessmentItemPossibleResponse	The collection of possible response options and values for an assessment item.
AssessmentItemResponse	Information related to a specific response to an assessment item by the person being assessed. The entity includes the response, a score or indication that the response was correct or incorrect and other information such as response time.

AssessmentItemResponseTheory	
AssessmentItemRubricCriterionResult	
AssessmentLanguage	The association of an Assessment to one or more languages.
AssessmentLevelsForWhichDesigned	The association of an Assessment to one or more grade levels for which the assessment is designed.
AssessmentNeedApipContent	Used as part of an Assessment Personal Needs Profile to define the content preferences and representation.
AssessmentNeedApipControl	Used as part of an Assessment Personal Needs Profile to define the control attributes.
AssessmentNeedApipDisplay	Used as part of an Assessment Personal Needs Profile to define the display attributes.
AssessmentNeedBraille	Defines as part of an Assessment Personal Needs Profile the attributes for Braille display
AssessmentNeedScreenEnhancement	Defines as part of an Assessment Personal Needs Profile the attributes for screen enhancement.
AssessmentParticipantSession	An entity that includes information about a specific person's participation in an Assessment Session.
AssessmentParticipantSession_Accommodation	The association of an Assessment Participant Session to one or more Accommodations.
AssessmentPerformanceLevel	Information about levels of performance used to classify or label the results of an assessment. Four styles are supported: <ol style="list-style-type: none"> 1. Specification of performance level by lower and upper cut scores 2. Specification of performance level by cut score - lower only 3. Specification of performance level without any mapping to scores 4. Specification of performance level with mapping to other scores

AssessmentPersonalNeedLanguageLearner	
AssessmentPersonalNeedScreenReader	Defines as part of an Assessment Personal Needs Profile the attributes for a screen reader.
AssessmentPersonalNeedsProfile	Identifies a type of need identified for a learner as part of an assessment need profile.
AssessmentPersonalNeedsProfileContent	
AssessmentPersonalNeedsProfileControl	
AssessmentPersonalNeedsProfileDisplay	
AssessmentPersonalNeedsProfileScreenEnhancement	
AssessmentRegistration	Information related to a specific person registered for an Assessment Administration, assigned a specific Assessment Form for participation in one or more Assessment Sessions.
AssessmentRegistration_Accommodation	The accommodation(s) associated to an Assessment Registration.
AssessmentResult	An entity that includes information about a person's results from an assessment, which may be for the entire assessment or one aspect of evaluation. The scoring method is defined by the related Assessment Subtest. The entity includes the score value and information about the score, such as a diagnostic statement.
AssessmentResult_PerformanceLevel	
AssessmentSession	Information related to an instance of delivering an assessment during a specific period of time.
AssessmentSessionStaffRole	The association of a Person to an Assessment identifying the role of the person.

AssessmentSubtest	Information for scoring an Assessment Form based on a set of Assessment Item responses with explicit rules to produce an Assessment Subtest Result, which may be for the entire Assessment Form or one aspect of evaluation based on a subset of Assessment Items.
AssessmentSubtest_AssessmentItem	The weighing factors for an Assessment Item on an Assessment Subtest.
AssessmentSubtest_LearningStandardItem	The learning standard items utilized by an assessment subtest.
AssessmentSubtestLevelsForWhichDesigned	Association of an Assessment Subtest to one or more Grade Levels.
Authentication	An application or service that can authenticate the identity of a person. The CEDS entity that includes information about an authentication provider, the login identifier used to authenticate a person's identity, and other information related to authentication of a person's identity.
Authorization	The CEDS entity that includes information about a data system or application that an authenticated person may access.
Classroom	A room where educational services are provided by a school, school system, state, or other agency or entity.
CompetencyItem_CompetencySet	The association of a learning standard item (competency item) to a competency set.
CompetencySet	The set of one or more competencies and criteria for completion of a learning goal, unit, course, program, degree, certification, or other achievement. (The criteria may be 'all' competencies in the set or 'at-least' # of competencies. Sets may be nested, e.g. all in subset A and 3 of 5 from subset B.)
CoreKnowledgeArea	The core knowledge areas addressed by a professional development activity.

Course	The organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester or two-week workshop) to an individual or group of students (e.g., a class).
CourseSection	A setting in which organized instruction of course content is provided to one or more students (including cross-age groupings) for a given period of time. (A course may be offered to more than one class/section.) Instruction, provided by one or more teachers or other staff members, may be delivered in person or via a different medium. Classes/Sections that share space should be considered as separate classes/sections if they function as separate units for more than 50 percent of the time.
CourseSectionAssessmentReporting	The method(s) that the instructor of the course uses to report the performance and achievement of all students. It may be a qualitative method such as individualized teacher comments or a quantitative method such as a letter or a numerical grade.
CourseSectionLocation	The location where a Course Section meets.
CourseSectionSchedule	The days and times when a Course Section meets.
CteCourse	The organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester or two-week workshop) to an individual or group of students (e.g., a class).
CteStudentAcademicRecord	Summary academic record information for a career and technical education student.
DisciplineMethodFirearm	The methods used to discipline students who are not children with disabilities (IDEA) involved in firearms and other outcomes of firearms incidents.
DisciplineMethodOfCwd	The type of discipline methods used by an organization for the discipline of children with disabilities.
EarlyChildhoodCredential	The credential related to early childhood education or development held by a person.

EarlyChildhoodProgramTypeOffered	The type(s) of early childhood programs offered. [CEDS Element: Early Childhood Program Type Offered, ID:000829]
ELChildDemographic	
ELChildIDEA	
ELChildOutcomeSummary	
ELChildProgramEligibility	
ELClassSection	A cohort of children receiving services together, or in some cases individually, usually for a predetermined amount of time, with at least one assigned primary teacher.
ELClassSectionService	The services provided in an early learning class/section.
ELEnrollment	Enrollment of early learners in a program, class, or section.
ELEnrollmentOtherFunding	
ELFacilityLicensing	The status and attributes of the facility license for an early learning organization.
ELOrganizationAvailability	Information on the early learning organization's availability to include time, groups served, facilities, and environment.
ELOrganizationMonitoring	
ELProgramLicensing	The status and attributes of the licensing for an early learning program.
ELQualityInitiative	
ELQualityRatingImprovement	The early learning organization's Quality Rating and Improvement System (QRIS) attributes.

ELStaff	Early learning staff attributes.
ELStaffAssignment	
ELStaffEducation	Early childhood credentials and education credits held by an early learning staff member.
ELStaffEmployment	Attributes for early learning staff employment. Extends from Staff.
Facility	Information about a piece of land, a building site, a building, or part of a building owned by and/or used for activities of an organizational unit such as a school, school system, program, or institution.
FinancialAccount	
FinancialAidApplication	An application for financial aid submitted by a current or prospective student/learner.
FinancialAidAward	An award of financial aid for a student/learner.
IDEADisciplineMethodFirearm	The methods used to discipline students who are children with disabilities (IDEA) involved in firearms and other outcomes of firearms incidents.
Incident	The details for an incident involving a student or school.
IncidentPerson	
IndividualizedProgram	Information on the type, design, dates, and participation of a student in an individualized program.
IndividualizedProgramService	
K12Course	The organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester or two-week workshop) to an individual or group of students (e.g., a class).

K12Lea	An administrative unit within K-12 education at the local level that exists primarily to operate schools or to contract for educational services. These units may or may not be co-extensive with county, city, or town boundaries.
K12LeaFederalFunds	Information on the federal funds received and distributed by the LEA under various programs.
K12LeaFederalReporting	Federal reporting status values and counts for an LEA.
K12LeaPreKEligibility	The groups of students for whom pre-kindergarten is available.
K12LeaPreKEligibleAgesIDEA	The ages of children not served under IDEA to whom the LEA's pre-kindergarten services are available.
K12LeaSafeDrugFree	Information about the LEA's performance under the Safe and Drug-Free Schools and Communities act.
K12LeaTitleIIIProfessionalDevelopment	The type of Title III professional development utilized by an LEA.
K12LeaTitleISupportService	The type of support services provided to students in Title I programs by an LEA.
K12OrganizationStudentResponsibility	The type of services/instruction the organization is responsible for the student.
K12ProgramOrService	Information on the programs and services offered by an LEA or school.
K12School	An institution that provides educational services; has one or more grade groups (PK through 12); has one or more teachers; is located in one or more buildings; has an assigned administrator(s).
K12SchoolCorrectiveAction	The types of corrective actions utilized by a K12 school under ESEA as amended.
K12SchoolGradeOffered	The specific grade or combination of grades offered by an education institution.
K12SchoolImprovement	Information on the improvement status for a K12 school.

K12SchoolStatus	The collection of status values for a K12 school.
K12Sea	The SEA is the state-level entity primarily responsible for the supervision of the state's public elementary and secondary schools.
K12SeaAlternateFundUse	Purposes that funds available under ESEA section 6111 (Grants for State Assessments and Related Activities) were used for purposes other than the costs of the development of the State assessments and standards required by section 1111(b). [CEDs Element: Uses of Funds for Purposes other than Standards and Assessment Development, ID:000459] (Foreign key - RefAlternateFundUse)
K12SeaFederalFundAllocation	The federal funds allocated by an SEA.
K12SeaFederalFunds	Information on the federal funds received by the SEA.
K12StaffAssignment	Describes a person's assignment to a K12 organization.
K12StaffEmployment	Employment attributes for a K12 Staff Member.
K12StudentAcademicHonor	Academic distinctions earned or awarded to a K12 student.
K12StudentAcademicRecord	The summary level academic record for a K12 student including graduation information.
K12StudentCohort	Information on the cohort for a K12 student.
K12StudentCourseSection	The attributes for a K12 student enrolled in a course section.
K12StudentCourseSectionMark	Defines information about a mark associated with a student for a course section, including flags to indicate if the mark is a final grade or a midterm grade.
K12StudentDiscipline	The detail information for the reason and action taken for a discipline event of a K12 student.
K12StudentEmployment	Employment information for a K12 Student.

K12StudentEnrollment	Information about a student officially registered on the roll of a school or schools.
K12StudentLiteracyAssessment	Information about literacy assessment given to a K12 student.
K12StudentSession	Information specific to a K12 student and session.
K12TitleIIILanguageInstruction	The collection of Title III language instructional programs offered by an LEA.
LearnerAction	The information about detailed actions taken by a learner while engaging in learning activities, such as asking for a hint when taking an online formative assessment.
LearnerActivity	The work assigned to a learner and/or performed by a learner that can comprise of interaction with learning resources, and assessments.
LearnerActivity_LearningResource	The collection of learning resources for a learner activity.
LearningGoal	An entity that specifies the learning that is intended for an individual learner and the success criteria use to indicate progress toward the learning goal. In the formative assessment process a learning goal exists within the framework of a Learning Progression / Competency-based Pathway defined within the context of Learning Standards.
LearningResource	Describes the content, materials, or informational resources that support learning.
LearningResourceAdaptation	
LearningResourceEducationLevel	The education level(s) associated to a learning resource.
LearningResourceMediaFeature	
LearningResourcePeerRating	An individual score, rating or level assigned to a Learning Resource by a person within the boundaries set by a Peer Rating System.
LearningResourcePhysicalMedia	

LearningStandardDocument	A collection of learning standard items, typically arranged in a hierarchical structure or classification scheme, reflecting expectations of learner competencies within a single subject area covering one or more levels. (examples: Head Start Child Outcomes Framework, Common Core State Standards for Mathematics, Accountability Criteria for National Health Care Cluster Foundation Standards).
LearningStandardItem	Content that either describes a specific competency (learning objective) or describes a grouping of competencies within the taxonomy of a Learning Standards Document.
LearningStandardItemAssociation	An entity that relates learning standard items to other learning standard items to support competency maps using competency to prerequisite-competency assertions, and to relate learning standard Items to other objects such as learning resources.
LearningStandardItemEducationLevel	The education level, grade level or primary instructional level at which a Learning Standard Item is intended.
Location	A location such as a physical address or mailing address.
LocationAddress	Location that contains a address, city, state, zip.
Organization	An entity that represents any type of organization. It includes information common to all types of organizations. CEDS also defines specific types of organizations such as Early Learning Organization, K12 School and Post Secondary Institution.
OrganizationAccreditation	The accreditation status of an organization and accreditation agency.
OrganizationCalendar	A set of dates associated with an organization.
OrganizationCalendarCrisis	Information about a crisis that caused the displacement of students
OrganizationCalendarDay	A calendar day as described by the organization. Used for the school day, typically used for the bell schedule.

OrganizationCalendarEvent	The scheduled or unscheduled event.
OrganizationCalendarSession	A prescribed span of time when an education institution is open, instruction is provided, and students are under the direction and guidance of teachers and/or education institution administration.
OrganizationEmail	An email address for an organization.
OrganizationFederalAccountability	Information on the status of the organization on various federal accountability measures.
OrganizationFinancial	The intersection of FinancialAccount and OrganizationCalendarSession (representing an AccountingPeriod) and containing the values for that accounting period.
OrganizationIdentifier	A unique number or alphanumeric code assigned to an organization by a school, school system, a state, or other agency or entity.
OrganizationIndicator	Describes any sort of indicator/metric/measure that is tracked at the organization level
OrganizationLocation	An association of a Location to an Organization.
OrganizationOperationalStatus	The classification of the operational condition of an organization.
OrganizationPersonRole	The association of an organization (e.g. school, section, employer) to a person with the role (e.g. student, staff).
OrganizationPolicy	Organizational policies. Examples would include Immunization Policy, Referral Policy, Language Translation Policy, and Employee Policy.
OrganizationProgramType	The instructional or non-instructional programs, activities and procedures designed to accomplish a predetermined educational objective or set of objectives or to provide support services to person and/or the community.

OrganizationRelationship	The relationship of one organization to another.
OrganizationTechnicalAssistance	
OrganizationTelephone	A telephone number for an organization.
OrganizationWebsite	The website URL for an organization.
PDActivityEducationLevel	
PeerRatingSystem	The peer rating / scaling system used to rate a Learning Resource.
Person	A person, including Students, Staff and Parents.
Person_AssessmentPersonalNeedsProfile	
PersonAddress	An address (e.g. physical or mailing) for a person.
PersonAllergy	
PersonBirthplace	The city, state, and country where a person was born.
PersonCareerEducationPlan	
PersonCredential	The credential awarded to a person.
PersonDegreeOrCertificate	The name of the degree or certificate earned by an individual. This includes honorary degrees conferred upon an individual.
PersonDemographicRace	The associations of a person to a race. Multiple associations are allowed.
PersonDisability	The disability status for an individual and their primary disability.
PersonEmailAddress	The electronic mail (e-mail) address for a person.

PersonFamily	The attributes of a person's family.
PersonHealth	Data points of a person's health
PersonHealthBirth	Data points of a person's health and status at time of birth.
PersonHomelessness	Persons who lack a fixed, regular, and adequate nighttime residence.
PersonIdentifier	Identifiers assigned to an individual.
PersonImmunization	The immunizations that a person has satisfactorily received.
PersonLanguage	Languages that a person uses to communicate.
PersonOtherName	Other names or aliases for a person.
PersonProgramParticipation	Identifies the type of participation for a person participating in a program.
PersonReferral	
PersonRelationship	Identifies two people and the nature of their relationship.
PersonStatus	Identifies a status (yes/no) for a person for a status type.
PersonTelephone	Telephone number for a person.
ProfessionalDevelopmentActivity	An activity designed for the purpose of developing somebody professionally.
ProfessionalDevelopmentRequirement	Professional development requirements.
ProfessionalDevelopmentSession	An Session designed for the purpose of developing somebody professionally.
ProfessionalDevelopmentSessionInstructor	

ProgramParticipationAE	Information on a person participating in an adult education program.
ProgramParticipationCte	Information on a person participating in a career and technical education program.
ProgramParticipationFoodService	Information on a person participating in a food service program.
ProgramParticipationMigrant	Information on a person participating in a migrant student education program.
ProgramParticipationNeglected	Information on a person participating in a neglected or delinquent student education program.
ProgramParticipationSpecialEducation	Information on a person participating in a special education program.
ProgramParticipationTeacherPrep	Information on a person participating in a teacher preparation education program.
ProgramParticipationTitleI	Information on a person participating in a Title I education program.
ProgramParticipationTitleIIILep	Information on a person participating in a Title III limited English proficiency education program.
PsCourse	The organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester or two-week workshop) to an individual or group of students (e.g., a class).
PsInstitution	An organization that provides educational programs for individuals who have completed or otherwise left educational programs in secondary school(s).
PsPriceOfAttendance	The price of attendance data for a postsecondary institution and a given session.
PsProgram	The attributes for a postsecondary program that define the type program, the program length, and other requirements for a degree or certificate.
PsSection	
PsSectionLocation	

PsStaffEmployment	Attributes for postsecondary staff employment. Extends from Staff.
PsStudentAcademicAward	An award conferred by a college, university, or other postsecondary education institution as official recognition for the successful completion of a program of study.
PsStudentAcademicRecord	The summary level academic record for a postsecondary student including graduation information.
PsStudentAdmissionTest	A student's performance on a test prepared and administered by an agency that is independent of any postsecondary education institution and is typically used for admissions purposes.
PsStudentApplication	Information on an individual who submits an application for admission to a postsecondary institution.
PsStudentCohort	
PsStudentCourseSectionMark	
PsStudentDemographic	Additional attributes for a postsecondary student (beyond those demographic attributes stored in PersonDemographic)
PsStudentEmployment	Employment information for a postsecondary student.
PsStudentEnrollment	Attributes of a person enrolled at a postsecondary institution.
PsStudentFinancialAid	Information on a person who applies for financial aid to participate in postsecondary education.
PSStudentProgram	The classification of a program of a postsecondary student.
PsStudentSection	A postsecondary student's performance in a class/section.
QuarterlyEmploymentRecord	The CEDS entity that includes person-level employment and earnings information from quarterly employment and earnings-related data from sources such as State UI Wage Records, the Wage Record Interchange System, or the Federal Employment Data Exchange System (FEDES).

RefAbsentAttendanceCategory	The category that describes how the student spends his or her time not physically present on school grounds and not participating in instruction or instruction-related activities at an approved off-grounds location. [CEDS Element: Absent Attendance Category, ID:000599]
RefAcademicAwardLevel	An indicator of the category of award conferred by a college, university, or other postsecondary education institution as official recognition for the successful completion of a program of study. [CEDS Element: Academic Award Level Conferred, ID:000002]
RefAcademicHonorType	A designation of the type of academic distinctions earned by or awarded to the student. [CEDS Element: Academic Honors Type, ID:000004]
RefAcademicRank	The academic rank of staff whose primary responsibility is instruction, research, and/or public service. Institutions without standard academic ranks should code staff whose primary responsibility is instruction, research, and/or public service as "No Academic Rank." [CEDS Element: Academic Rank, ID:000740]
RefAcademicSubject	The description of the academic content or subject area (e.g., arts, mathematics, reading, or a foreign language) being evaluated. [CEDS Element: Assessment Academic Subject, ID:000021]
RefAcademicTermDesignator	The academic term for which the data apply. [CEDS Element: Academic Term Designator, ID:000727]
RefAccommodationsNeededType	Codes identifying the set of health accommodations. [CEDS Element: Accommodations Needed Type, ID:001277]
RefAccreditationAgency	The agency that accredited a program. [CEDS Element: Accreditation Agency, ID:000982]
RefActivityRecognitionType	The nature of recognition given to the student for accomplishments in a co-curricular, or extra-curricular activity. [CEDS Element: Recognition for Participation or Performance in an Activity, ID:000229]

RefAdditionalCreditType	The type of credits or units of value available for the completion of a course in addition to Carnegie Units. [CEDS Element: Additional Credit Type, ID:000596]
RefAddressType	List of identification system types.
RefAdministrativeFundingControl	The type of education institution as classified by its funding source. [CEDS Element: Administrative Funding Control, ID:000012]
RefAdmittedStudent	Applicant who has been granted an official offer to enroll in a postsecondary institution. Admitted applicants should include wait-listed students who were subsequently offered admission. [CEDS Element: Admitted Student, ID:000756]
RefAdvancedPlacementCourseCode	Course areas for advanced placement or credit. For a list of codes see http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/index.html . [CEDS Element: Advanced Placement Course Code, ID:001278]
RefAeCertificationType	An indication of the category of certification a person holds. [CEDS Element: Adult Education Certification Type, ID:001085]
RefAeFunctioningLevelAtIntake	An individual's entering skill level, as defined by the National Reporting System for Adult Education and determined by an approved standardized assessment at program intake. [CEDS Element: Adult Educational Functioning Level at Intake, ID:000779]
RefAeFunctioningLevelAtPosttest	An individual's skill level, as defined by the National Reporting System for Adult Education and determined by an approved standardized assessment after a set time period or number of instructional hours. [CEDS Element: Adult Educational Functioning Level at Posttest, ID:000780]
RefAeInstructionalProgramType	The type of instructional program in which an adult is enrolled. [CEDS Element: Adult Education Instructional Program Type, ID:001077]

RefAePostsecondaryTransitionAction	The action taken with respect to postsecondary enrollment by the learner after program exit or when co-enrolled in ABE and postsecondary with respect to enrollment in a postsecondary educational or occupational skills program building on prior services or training received. [CEDS Element: Adult Education Postsecondary Transition Action, ID:000784]
RefAeSpecialProgramType	The type, by location or delivery mode , of adult education instruction program in which an adult participates. [CEDS Element: Adult Education Special Program Environment, ID:000782]
RefAeStaffClassification	The titles of employment, official status, or rank of adult education staff. [CEDS Element: Adult Education Staff Classification, ID:000786]
RefAeStaffEmploymentStatus	The condition under which a person has agreed to serve an employer. [CEDS Element: Adult Education Staff Employment Status, ID:001083]
RefAllergySeverity	The level of severity of a person's reaction to an allergen. [CEDS Element: Allergy Severity, ID:001282]
RefAllergyType	Type of allergy condition attributed to a person as defined by the SNOWMED Clinical Terms(r) vocabulary. [CEDS Element: Allergy Type, ID:001283]
RefAlternateFundUses	Purposes that funds available under ESEA section 6111 (Grants for State Assessments and Related Activities) were used during the 2009-10 school year for purposes other than the costs of the development of the State assessments and standards required by section 1111(b). [CEDS Element: Uses of Funds for Purposes other than Standards and Assessment Development, ID:000459]
RefAlternativeSchoolFocus	An indication of the specific group of students whose needs the alternative school is designed to meet. [CEDS Element: Alternative School Focus Type, ID:000015]
RefAltRouteToCertificationOrLicensure	An indication of whether a person is enrolled in an alternative teacher preparation program as defined by Title II. [CEDS Element: Alternative Route to Certification or Licensure, ID:000769]

RefAmaoAttainmentStatus	An indication whether the organization met the Annual Measurable Achievement Objectives (AMAO) for attaining English proficiency for limited English proficient (LEP) students under Title III of ESEA. [CEDS Elements: Annual Measurable Achievement Objective AYP Progress Attainment Status for LEP Students (000579), Annual Measurable Achievement Objective Proficiency Attainment Status for LEP Students (000544), Annual Measurable Achievement Objective Progress Attainment Status for LEP Students (000554)]
RefAapiInteractionType	The assessment item body interaction type as defined by IMS Global specifications. [CEDS Element: Assessment Item Interaction Type, ID:001158]
RefAssessmentAccommodationCategory	A category of accommodations needed for a given assessment. [CEDS Element: Assessment Accommodation Category, ID:000383]
RefAssessmentAccommodationType	The specific accommodation necessary for the administration of the assessment. [CEDS Element: Assessment Accommodation Type, ID:000385]
RefAssessmentAssetIdentifierType	The type of identifier that is provided for this asset. [CEDS Element: Assessment Asset Identifier Type, ID:001199]
RefAssessmentAssetType	Specifies a predominant type of assessment asset represented by the Learning Resource. Assessment assets represent any content used to compose an assessment item, is referenced by an item but not part of the item content itself, or is content that is included as part of a section within an assessment form. Assets can be static content such as art work or dynamic assets such as calculators. [CEDS Element: Assessment Asset Type, ID:001196]
RefAssessmentFormSectionIdentificationSystem	A coding scheme that is used for identification of an Assessment Form Section. [CEDS Element: Identification System for Assessment Form Section, ID:001190]
RefAssessmentGradeLevel	The grade or developmental level of a student when registering for an assessment, when taking the assessment, or for which an assessment is design. [CEDS Elements: Grade Level When Assessed (000126), Assessment Registration Grade Level To Be Assessed (001057)]

RefAssessmentItemCharacteristicType	The type of psychometric measure provided for assessment item. [CEDS Element: Assessment Item Characteristic Type, ID:000392]
RefAssessmentItemResponseStatus	The status of the response for a given item. [CEDS Element: Assessment Item Response Status, ID:000405]
RefAssessmentItemType	The specific type of assessment item. [CEDS Element: Assessment Item Type, ID:000390]
RefAssessmentNeedAlternativeRepresentationType	Defines as part of an Assessment Personal Needs Profile the default presentation mode of the associated Alternative Representations accessibility. [CEDS Element: Assessment Need Alternative Representation Type, ID:001041]
RefAssessmentNeedBrailleGradeType	Defines as part of an Assessment Personal Needs Profile the grade of Braille to use when using a Braille display. [CEDS Element: Assessment Need Braille Grade Type, ID:001032]
RefAssessmentNeedBrailleMarkType	Defines as part of an Assessment Personal Needs Profile what textual properties to mark when using a Braille display. [CEDS Element: Assessment Need Braille Mark Type, ID:001035]
RefAssessmentNeedBrailleStatusCellType	Defines as part of an Assessment Personal Needs Profile the preferred presence or location of a Braille display status cell. [CEDS Element: Assessment Need Braille Status Cell Type, ID:001037]
RefAssessmentNeedHazardType	Defines as part of an Assessment Personal Needs Profile a characteristic of a digital resource that may be specified as being dangerous to a user. [CEDS Element: Assessment Need Hazard Type, ID:001024]
RefAssessmentNeedIncreasedWhitespacingType	Defines the user preferences for white spacing in lines, words and characters as part of an Assessment Personal Needs Profile. [CEDS Element: Assessment Need Increased Whitespacing Type, ID:001054]
RefAssessmentNeedLanguageLearnerType	

RefAssessmentNeedMaskingType	Specifies as part of an Assessment Personal Needs Profile the type of masks the user is able to create to cover portions of the question until needed. [CEDS Element: Assessment Need Masking Type, ID:001046]
RefAssessmentNeedNumberOfBrailleDots	Defines as part of an Assessment Personal Needs Profile the number of dots in a Braille cell. [CEDS Element: Assessment Need Number of Braille Dots Type, ID:001033]
RefAssessmentNeedSigningType	Defines as part of an Assessment Personal Needs Profile the type of signing preferred by the user. [CEDS Element: Assessment Need Signing Type, ID:001040]
RefAssessmentNeedSpokenSourcePreferenceType	Defines as part of an Assessment Personal Needs Profile the preferred spoken audio form. [CEDS Element: Assessment Need Spoken Source Preference Type, ID:001042]
RefAssessmentNeedSupportTool	Defines as part of an Assessment Personal Needs Profile the electronic tool associated with a resource. [CEDS Element: Assessment Need Support Tool Type, ID:001025]
RefAssessmentNeedUsageType	Defines as part of an Assessment Personal Needs Profile the rating for the collection of Access for All (AfA) needs and preferences. [CEDS Element: Assessment Need Usage Type, ID:001026]
RefAssessmentNeedUserSpokenPreferenceType	Used as part of an Assessment Personal Needs Profile to define the type of material that should be rendered using the read aloud alternative content. [CEDS Element: Assessment Need User Spoken Preference Type, ID:001044]
RefAssessmentParticipationIndicator	An indication of whether a student participated in an assessment. [CEDS Element: Assessment Registration Participation Indicator, ID:000025]
RefAssessmentPlatformType	The platform with which the assessment was delivered to the student during the assessment session. [CEDS Element: Assessment Participant Session Platform Type, ID:000386]
RefAssessmentPretestOutcome	The results of a pre-test in academic subjects. [CEDS Element: Assessment Subtest Result Pretest Outcome, ID:000572]

RefAssessmentPurpose	The reason for which an assessment is designed or delivered. [CEDS Element: Assessment Purpose, ID:000026]
RefAssessmentReasonNotCompleting	The primary reason a participant did not complete an assessment. [CEDS Element: Assessment Registration Reason Not Completing, ID:000540]
RefAssessmentReasonNotTested	The primary reason a student is not tested. [CEDS Element: Reason Not Tested, ID:000228]
RefAssessmentReportingMethod	The method used to report the performance and achievement of all students. It may be a qualitative method such as individualized teacher comments or a quantitative method such as a letter or a numerical grade. In some cases, more than one type of reporting method may be used.
RefAssessmentSessionSpecialCircumstance Type	An unusual event occurred during the administration of the assessment. This could include fire alarm, student became ill, etc. [CEDS Element: Assessment Session Special Circumstance Type, ID:000389]
RefAssessmentSessionStaffRoleType	The type of role served related to the administration of an assessment session. [CEDS Element: Assessment Session Staff Role Type, ID:001212]
RefAssessmentSessionType	The type of session that is scheduled. [CEDS Element: Assessment Session Type, ID:001018]
RefAssessmentSubtestIdentifierType	The type of identifier that is provided for a Subtest. [CEDS Element: Assessment Subtest Identifier Type, ID:001014]
RefAssessmentType	The category of an assessment based on format and content. [CEDS Element: Assessment Type, ID:000029]
RefAssessmentTypeChildrenWithDisabilities	The types of assessments administered to children with disabilities. [CEDS Element: Assessment Type Administered to Children With Disabilities, ID:000415]
RefAttendanceEventType	The type of attendance event. [CEDS Element: Attendance Event Type, ID:000601]

RefAttendanceStatus	The status of a person's attendance associated with an Attendance Event Type, Calendar Event Date, in an organization-person-role context. [CEDS Element: Attendance Status, ID:000076]
RefAypStatus	An indication of whether the state, district, or school met the Adequate Yearly Progress (AYP) requirements for the school year, as determined by the state-established criteria. [CEDS Element: Adequate Yearly Progress Status, ID:000011]
RefBarrierToEducatingHomeless	Barriers to the enrollment and success of homeless children and youths. [CEDS Element: Barrier to Educating Homeless, ID:000449]
RefBlendedLearningModelType	A type of formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace; at least in part in a supervised brick-and-mortar location away from home; and the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience. [CEDS Element: Blended Learning Model Type, ID:001287]
RefBloomsTaxonomyDomain	Classification of the Learning Standard Item using Bloom's Taxonomy Domains. [CEDS Element: Learning Standard Item Blooms Taxonomy Domain, ID:000875]
RefBuildingUseType	How a building is principally used, regardless of its original design. [CEDS Element: Building Use Type, ID:001206]
RefCalendarEventType	The type of scheduled or unscheduled event that causes interruption in direct instruction. [CEDS Element: Calendar Event Type, ID:000603]
RefCampusResidencyType	A person's residency arrangement as defined in the Free Application for Federal Student Aid (FAFSA). [CEDS Element: Campus Residency Type, ID:000035]
RefCareerCluster	The career cluster that defines the industry or occupational focus that may be associated with a career pathways program, plan of study, or course. [CEDS Element: Career Cluster, ID:001288]

RefCareerEducationPlanType	An indicator of whether a student completed an individualized guidance and counseling plan. [CEDS Element: Career Education Plan Type, ID:001290]
RefCarnegieBasicClassification	The Basic Classification is an update of the traditional classification framework developed by the Carnegie Commission on Higher Education in 1970 to support its research program, and later published in 1973 for use by other researchers. [CEDS Element: Carnegie Basic Classification, ID:000038]
RefCharterSchoolApprovalAgencyType	The type of agency that approved the establishment or continuation of a charter school. [CEDS Element: Charter School Approval Agency Type, ID:001292]
RefCharterSchoolType	The category of charter school. [CEDS Element: Charter School Type, ID:000710]
RefChildDevelopmentAssociateType	Type of Child Development Associate credential as defined by options. [CEDS Element: Child Development Associate Type, ID:000806]
RefChildOutcomesSummaryRating	Codes used to identify a child's level of functioning. [CEDS Elements: Child Outcomes Summary Rating A (ID:001507), Child Outcomes Summary Rating B (ID:001508), Child Outcomes Summary Rating C (ID:001509)]
RefCipCode	A six-digit code in the form xx.xxxx that identifies instructional program specialties within educational institutions. [CEDS Element: Classification of Instructional Program Code, ID:000043, Course CIP Code, ID:001502]
RefCipUse	An indicator of whether the CIP Code is referencing an enrollment program or an award program. [CEDS Element: Classification of Instructional Program Use, ID:000044]
RefCipVersion	The version of CIP being reported. [CEDS Element: Classification of Instructional Program Version, ID:000045]
RefClassroomPositionType	The type of position the staff member holds in the specific class/section. [CEDS Element: Classroom Position Type, ID:000622]

RefCohortExclusion	Those persons who may be removed (deleted) from a cohort (or subcohort). For the Graduation Rates and Fall Enrollment retention rate reporting, persons may be removed from a cohort if they left the institution for one of the following reasons: death or total and permanent disability; service in the armed forces (including those called to active duty); service with a foreign aid service of the federal government, such as the Peace Corps; or service on official church missions. [CEDS Element: Cohort Exclusion, ID:000106]
RefCommunicationMethod	The types of communication methods with family members. [CEDS Element: Parent Communication Method, ID:000857]
RefContentStandardType	An indication as to whether an assessment conforms to a standard. [CEDS Element: Assessment Content Standard Type, ID:000605]
RefContinuationOfServices	Reason why the student is being served under the continuation of services provision of the MEP. [CEDS Element: Continuation of Services Reason, ID:000429]
RefControlOfInstitution	A classification of whether a postsecondary institution is operated by publicly elected or appointed officials (public control) or by privately elected or appointed officials and derives its major source of funds from private sources (private control). [CEDS Element: Control of Institution, ID:000048]
RefCoreKnowledgeArea	A description of the core knowledge areas addressed by professional development. [CEDS Element: Early Learning Core Knowledge Area, ID:000813]
RefCorrectionalEducationFacilityType	The type of facility in which an inmate receives correctional education services. [CEDS Element: Correctional Education Facility Type, ID:001296]
RefCorrectiveActionType	The types of corrective actions under ESEA as amended. [CEDS Element: Corrective Action Type, ID:000049]
RefCountry	The country in which an address is located. [CEDS Element: Country Code, ID:000050]
RefCounty	List of counties.

RefCourseAcademicGradeStatusCode	Additional information regarding the context of the given grade. [CEDS Element: Course Academic Grade Status Code, ID:001299]
RefCourseApplicableEducationLevel	The education level, grade level or primary instructional level at which a course is intended. [CEDS Element: Course Applicable Education Level, ID:001301]
RefCourseCreditBasisType	The type of enrollment associated with the credit hours for the course. [CEDS Element: Course Credit Basis Type, ID:001303]
RefCourseCreditLevelType	The level of credit associated with the credit hours earned for the course. [CEDS Element: Course Credit Level Type, ID:001304]
RefCourseCreditUnit	The type of credit (unit, semester, or quarter) associated with the credit hours earned for the course. [CEDS Element: Course Credit Units, ID:000057]
RefCourseGpaApplicability	An indicator of whether or not this course being described is included in the computation of the student's Grade Point Average (GPA). [CEDS Element: Course Grade Point Average Applicability, ID:000060]
RefCourseHonorsType	An indication that the course is or can be counted as an honors course. [CEDS Element: Course Honors Type, ID:001307]
RefCourseInstructionMethod	The primary method of instruction used for the course. [CEDS Element: Course Instruction Method, ID:001308]
RefCourseInstructionSiteType	An indication of the type of location at which the course is taught. [CEDS Element: Course Instruction Site Type, ID:001310]
RefCourseInteractionMode	The primary type of interaction, synchronous or asynchronous, defined for the course. [CEDS Element: Course Interaction Mode, ID:001311]

RefCourseLevelCharacteristic	An indication of the general nature and difficulty of instruction provided throughout a course. [CEDS Element: Course Level Characteristic, ID:000061]
RefCourseLevelType	The level of work that is reflected in the credits associated with the academic course being described or the level of the typical individual taking the academic course. [CEDS Element: Course Level Type, ID:001312]
RefCourseRepeatCode	Indicates that an academic course has been repeated by a student and how that repeat is to be computed in the student's academic grade average. [CEDS Element: Course Repeat Code, ID:000065]
RefCourseSectionAssessmentReportingMethod	The method that the instructor of the course uses to report the performance and achievement of all students. It may be a qualitative method such as individualized teacher comments or a quantitative method such as a letter or a numerical grade. In some cases, more than one type of reporting method may be used. [CEDS Element: Course Section Assessment Reporting Method, ID:000027]
RefCourseSectionDeliveryMode	The primary setting or medium of delivery for the course. [CEDS Element: Course Section Instructional Delivery Mode, ID:001161]
RefCourseSectionEnrollmentStatusType	The status related to a student enrollment in an instance of a course. [CEDS Element: Course Section Enrollment Status Type, ID:000976]
RefCourseSectionEntryType	The process by which a student enters a school (Course Section) during a given academic session. [CEDS Element: Course Section Entry Type, ID:000650]
RefCourseSectionExitType	The circumstances under which the student exited from membership in a course section. [CEDS Element: Course Section Exit Type, ID:000652]
RefCredentialType	The category of credential a person holds. [CEDS Element: Credential Type, ID:000071]

RefCreditHoursAppliedOtherProgram	Codes identifying the set of credit hours taken in other programs or degrees that were applied to the individual's degree. [CEDS Element: Credit Hours Applied Other Program, ID:001317]
RefCreditTypeEarned	The type of credits or units of value awarded for the completion of a course. [CEDS Element: Credit Type Earned, ID:000072]
RefCriticalTeacherShortageCandidate	An indication of whether a person is pursuing licensure/certification in a field designated as a shortage area as defined by Title II. [CEDS Element: Critical Teacher Shortage Area Candidate, ID:000770]
RefCteGraduationRateInclusion	An indication of how CTE concentrators are included in the state's computation of its graduation rate. [CEDS Element: Career and Technical Education Graduation Rate Inclusion, ID:000075]
RefCteNonTraditionalGenderStatus	An indication of whether CTE participants were members of an underrepresented gender group (where one gender comprises less than 25 percent of the persons employed in those occupations or field of work). [CEDS Element: Career Technical Education Nontraditional Gender Status, ID:000588]
RefCurriculumFrameworkType	An indication of the standard curriculum used for this course. [CEDS Element: Curriculum Framework Type, ID:000712]
RefDegreeOrCertificateType	The type of degree or certificate earned by a person. [CEDS Element: Degree or Certificate Type, ID:000343]
RefDentalInsuranceCoverageType	The source of insurance covering an person's dental care. [CEDS Element: Dental Insurance Coverage, ID:000336]
RefDentalScreeningStatus	The condition of a person's mouth or oral cavity; more specifically the condition of the hard tissues (i.e., teeth and jaws) and the soft tissues (i.e., gums, tongue, lips, palate, mouth floor, and inner cheeks). Good oral health denotes the absence of clinically manifested disease or abnormalities of the oral cavity. [CEDS Element: Dental Screening Status, ID:000310]

RefDependencyStatus	A person's classification as dependent or independent with regards to eligibility for Title IV Federal Student aid. [CEDS Element: Dependency Status, ID:000079]
RefDisabilityConditionStatusCode	A code indicating the disability condition status. [CEDS Element: Disability Condition Status Type, ID:001319]
RefDisabilityConditionType	Codes identifying the set of disability conditions. [CEDS Element: Disability Condition Type, ID:001320]
RefDisabilityDeterminationSourceType	Codes identifying the set of disability determination sources. [CEDS Element: Disability Determination Source Type, ID:001321]
RefDisabilityType	The disability condition that best describes a person's impairment. [CEDS Element: Primary Disability Type, ID:000218]
RefDisciplinaryActionTaken	Identifies the consequences of an incident for the student(s) involved in an incident as perpetrator(s). [CEDS Element: Disciplinary Action Taken, ID:000488]
RefDisciplineLengthDifferenceReason	The reason for the difference, if any, between the official and actual lengths of a student's disciplinary assignment. [CEDS Element: Discipline Action Length Difference Reason, ID:000609]
RefDisciplineMethodFirearms	The method used to discipline students who are not children with disabilities (IDEA) involved in firearms and other outcomes of firearms incidents. [CEDS Element: Discipline Method for Firearms Incidents, ID:000555]
RefDisciplineMethodOfCwd	The type of suspension or expulsion used for the discipline of children with disabilities. [CEDS Element: Discipline Method of Children with Disabilities, ID:000538]
RefDisciplineReason	The reason why the student was disciplined. [CEDS Element: Discipline Reason, ID:000545]

RefDistanceEducationCourseEnrollment	An individual's enrollment in a course or courses in which the instructional content is delivered exclusively via distance education. Distance education is education that uses one or more technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Technologies used for instruction may include: Internet; one-way and two-way transmissions through open broadcasts, closed circuit, cable, microwave, broadband lines, fiber optics, satellite or wireless communication devices; audio conferencing; and video cassette, DVDs, and CD-ROMs, if the cassette, DVDs, and CD-ROMs are used in a course in conjunction with the technologies listed above. [CEDS Element: Distance Education Course Enrollment, ID:000728]
RefDoctoralExamsRequiredCode	A qualifier identifying the types of exams required of doctoral level individuals. [CEDS Element: Doctoral Exams Required Code, ID:001327]
RefEarlyChildhoodCredential	The credential related to early childhood education or development held by a person. [CEDS Element: Early Childhood Credential, ID:000345]
RefEarlyChildhoodEnrollmentServiceType	The type of programs in which the child is enrolled. [CEDS Element: Early Childhood Enrollment Service Type, ID:000318]
RefEarlyChildhoodProgramType	The system outlining activities and procedures based on a set of required services and standards. [CEDS Element: Early Childhood Program Type, ID:000829]
RefEducationLevel	The extent of formal instruction a person has received (e.g., the highest grade in school completed or its equivalent or the highest degree received). [CEDS Elements: Highest Level of Education Completed (000141), Learning Resource Education Level (001246)]
RefEducationLevelType	List of identification system types.
RefEducationStaffClassification	The titles of employment, official status, or rank of education staff. [CEDS Element: Education Staff Classification, ID:000087]

RefELClassGroupCurriculumType	The type of curriculum used in an early learning classroom or group. [CEDS Element: Early Learning Class Group Curriculum Type, ID:000823]
RefElementaryMiddleAdditional	An indication of whether the school or district met the Elementary/Middle Additional Indicator requirement in accordance with state definition for the purpose of determining Adequate Yearly Progress (AYP). [CEDS Element: Elementary-Middle Additional Indicator Status, ID:000091]
RefELExperience	Type(s) of prior experience (if any) in an early childhood program. [CEDS Element: Prior Early Childhood Experience, ID:000319]
RefELFacilityLicensingStatus	The status of the facility license. [CEDS Element: Facility Licensing Status, ID:000984]
RefELFederalFundingType	Federal source that contributes to the EL program [CEDS Element: Early Learning Federal Funding Type, ID:001328]
RefELGroupSizeStandardMet	An indication of whether a program meets NAEYC or NAFCC standards for infant group sizes. [CEDS Element: Early Learning Group Size Standards Met, ID:000824]
RefELLevelOfSpecialization	The extent to which a person concentrates upon a particular subject matter area during his or her period of study at an educational institution. [CEDS Element: Level of Specialization in Early Learning, ID:000341]
RefELOtherFederalFundingSources	The other contributing funding sources. [CEDS Element: Early Learning Other Federal Funding Sources, ID:001335]
RefELOutcomeMeasurementLevel	Use for outcome measures in early learning. [CEDS Element: Early Learning Outcome Measurement Level, ID:001336]
RefELProfessionalDevelopmentTopicArea	The topical area of competence needed for professional development. [CEDS Element: Early Learning Professional Development Topic Area, ID:001337]

RefELProgramEligibility	Category under which the person is eligible for an early childhood program or service. [CEDS Element: Early Learning Program Eligibility Category, ID:000304]
RefELProgramEligibilityStatus	The status of eligibility for the child. [CEDS Element: Early Learning Program Eligibility Status, ID:001339]
RefELProgramLicenseStatus	The current licensing status for an early learning program. [CEDS Element: Early Learning Program Licensing Status, ID:000828]
RefELServiceType	The type of programs in which the child is enrolled. [CEDS Element: Early Childhood Enrollment Service Type, ID:000318]
RefEmailType	The type of electronic mail (e-mail) address listed for a person or organization. [CEDS Element: Electronic Mail Address Type, ID:000089]
RefEmployedAfterExit	An individual who is a paid employee or works in his or her own business, profession, or farm, as reported through the State Unemployment Insurance Wage Report, FEDES, or WRIS, after exiting secondary, postsecondary, or adult education or workforce programs. [CEDS Element: Employed After Exit, ID:000988]
RefEmployedPriorToEnrollment	An individual who is a paid employee or works in his or her own business, profession, or farm, as reported through the State Unemployment Insurance Wage Report, FEDES, or WRIS, before enrolling in secondary, postsecondary, or adult education or workforce programs. [CEDS Element: Employed Prior to Enrollment, ID:001342]
RefEmployedWhileEnrolled	An individual who is a paid employee or works in his or her own business, profession, or farm, as reported through the State Unemployment Insurance Wage Report, FEDES, or WRIS, and at the same time is enrolled in secondary, postsecondary, or adult education or workforce programs. [CEDS Element: Employed While Enrolled, ID:000987]

RefEmploymentContractType	The type of employment contract used by an institution. [CEDS Element: Contract Type, ID:000737]
RefEmploymentLocation	The state or other location in which an individual is found employed. [CEDS Element: Employment Location, ID:000990]
RefEmploymentSeparationReason	The primary reason for the termination of the employment relationship. [CEDS Element: Employment Separation Reason, ID:000620]
RefEmploymentSeparationType	A designation of the type of separation occurring between a person and the organization. [CEDS Element: Employment Separation Type, ID:000621]
RefEmploymentStatus	The condition under which a person has agreed to serve an employer. [CEDS Element: Employment Status, ID:000347]
RefEmploymentStatusWhileEnrolled	An indication of the individual's employment status while enrolled. [CEDS Element: Employment Status While Enrolled, ID:001343]
RefEndOfTermStatus	The nature of the student's progress at the end of a given school term. [CEDS Element: End of Term Status, ID:000093]
RefEnrollmentStatus	An indication as to whether a student's name was, is, or will be officially registered on the roll of a school or schools. [CEDS Element: Enrollment Status, ID:000094]
RefEntityType	CEDS entities. Used when the relationship of data requires the associated entity to be specified.
RefEntryType	The process by which a student enters a school during a given academic session. [CEDS Element: Entry Type, ID:000099]
RefEnvironmentSetting	The site or setting in which a person receives care, education, and/or services are provided. [CEDS Element: Early Childhood Setting, ID:000356]

RefERAdministrativeDataSource	Administrative data source of information used to collect employment and earnings-related data. [CEDs Element: Employment Record Administrative Data Source, ID:000994]
RefERSRuralUrbanContinuumCode	Rural-Urban Continuum Codes form a classification scheme that distinguishes metropolitan (metro) counties by the population size of their metro area, and nonmetropolitan (nonmetro) counties by degree of urbanization and adjacency to a metro area or areas. The metro and nonmetro categories have been subdivided into three metro and six nonmetro groupings, resulting in a nine-part county codification. The codes allow researchers working with county data to break such data into finer residential groups beyond a simple metro-nonmetro dichotomy, particularly for the analysis of trends in nonmetro areas that may be related to degree of rurality and metro proximity. [CEDs Element: Economic Research Service Rural-Urban Continuum Code, ID:000862]
RefExitOrWithdrawalStatus	An indication as to whether an instance of student exit/withdrawal is considered to be of a permanent or temporary nature. [CEDs Element: Exit or Withdrawal Status, ID:000108]
RefExitOrWithdrawalType	The circumstances under which the student exited from membership in an educational institution. [CEDs Element: Exit or Withdrawal Type, ID:000110]
RefFamilyIncomeSource	Sources of total family income. [CEDs Element: Source of Family Income, ID:000333]
RefFederalProgramFundingAllocationType	The type of federal program funding allocation or distribution made. [CEDs Element: Federal Programs Funding Allocation Type, ID:000548]
RefFinancialAccountCategory	A label for a grouping of financial accounts, based on type and purpose. [CEDs Element: Financial Account Category, ID:001345]
RefFinancialAccountFundClassification	A separate fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, or changes therein. [CEDs Element: Financial Account Fund Classification, ID:001347]

RefFinancialAccountProgramCode	The code associated with the program category used for financial accounting -- a plan of activities and procedures designed to accomplish a predetermined objective or set of objectives. [CEDS Element: Financial Account Program Code, ID:001349]
RefFinancialAidApplicationType	The type of financial application completed by an individual. [CEDS Element: Financial Aid Application Type, ID:001223]
RefFinancialAidAwardStatus	An indication of whether the financial aid type being reported is aid that has been awarded, accepted or dispersed. [CEDS Element: Financial Aid Award Status, ID:000363]
RefFinancialAidAwardType	The classification of financial aid awarded to a person for the academic term/year. [CEDS Element: Financial Aid Award Type, ID:000113]
RefFinancialBalanceSheetAccountCode	Balance sheet accounts and statement of net asset accounts are used to track financial transactions for each fund. Such financial statements report assets, liabilities, and equity accounts only and are considered "snapshots" of how these accounts stand as of a certain point in time. Based on codes specified in the NCES Handbook "Financial Accounting for Local and State School Systems: 2009 Edition." [CEDS Element: Financial Balance Sheet Account Code, ID:001353]
RefFinancialExpenditureFunctionCode	The function describes the activity for which a service or material object is acquired. The functions of a school district are classified into five broad areas: instruction, support services, operation of non-instructional services, facilities acquisition and construction, and debt service. Functions are further classified into sub functions. [CEDS Element: Financial Expenditure Function Code, ID:001354]
RefFinancialExpenditureObjectCode	This classification is used to describe the service or commodity obtained as the result of a specific expenditure. [CEDS Element: Financial Expenditure Object Code, ID:001355]
RefFinancialRevenueAccountCode	Codes are for recording revenue and other receivables by source. Based on codes specified in the NCES Handbook "Financial Accounting for Local and State School Systems: 2009 Edition" [CEDS Element: Financial Revenue Account Code, ID:001468]

RefFirearmType	The type of firearm. [CEDS Element: Firearm Type, ID:000557]
RefFoodServiceEligibility	An indication of a student's level of eligibility to participate in the National School Lunch Program for breakfast, lunch, snack, supper, and milk programs. [CEDS Element: Eligibility Status for School Food Service Programs, ID:000092]
RefFoodServiceParticipation	An indication of a student's participation in free, reduced price, full price breakfast, lunch, snack, supper, and milk programs. [CEDS Element: Participation in School Food Service Programs, ID:000325]
RefFrequencyOfService	The frequency at which a service is planned to occur. [CEDS Element: Frequency of Service, ID:001356]
RefFullTimeStatus	An indication of whether an individual is employed for a standard number of hours (as determined by civil or organizational policies) in a week, month, or other period of time. [CEDS Element: Full-time Status, ID:000736]
RefGoalsForAttendingAdultEducation	A person's reasons for attending an adult education class or program. [CEDS Element: Goals for Attending Adult Education, ID:001079]
RefGpaWeightedIndicator	An indication of whether the reported GPA is weighted or unweighted. [CEDS Element: Grade Point Average Weighted Indicator, ID:000123]
RefGradeLevel	Grade levels offered by educational institutions. [CEDS Elements: Assessment Registration Grade Level When Assessed (
RefGradeLevelType	List of identification system types.
RefGradePointAverageDomain	The domain to which the Grade Point Average is referencing. [CEDS Element: Grade Point Average Domain, ID:000758]

RefGraduateAssistantIpedCategory	The Integrated Postsecondary Education Data System (IPEDS) occupational categories used to report graduate assistants. [CEDS Element: Graduate Assistant IPEDS Occupation Category, ID:000743]
RefGraduateOrDoctoralExamResultsStatus	The individual's status in completing exams required for graduate or doctoral degree programs. [CEDS Element: Graduate or Doctoral Exam Results Status, ID:001357]
RefGunFreeSchoolsActReportingStatus	An indication of whether the school or local education agency (LEA) submitted a Gun-Free Schools Act (GFSA) of 1994 report to the state, as defined by Title 18, Section 921. [CEDS Element: Gun Free Schools Act Reporting Status, ID:000134]
RefHealthInsuranceCoverage	The nature of insurance covering a person's hospitalization and other health or medical care. [CEDS Element: Insurance Coverage, ID:000335]
RefHearingScreeningStatus	Status of an examination used to measure a person's ability to perceive sounds. [CEDS Element: Hearing Screening Status, ID:000309]
RefHigherEducationInstitutionAccreditationStatus	An indication of the accreditation status of a higher education institution. [CEDS Element: Higher Education Institution Accreditation Status, ID:000818]
RefHighestEducationLevelCompleted	The highest level of education attained by a person. [CEDS Elements: Father's or Paternal Guardian Education (ID:001230), Mother's or Maternal Guardian Education (ID:001229)]
RefHighSchoolDiplomaDistinctionType	The distinction of the diploma or credential that is awarded to a student in recognition of their completion of the curricular requirements. [CEDS Element: High School Diploma Distinction Type, ID:000713]
RefHighSchoolDiplomaType	The type of diploma/credential that is awarded to a person in recognition of his/her completion of the curricular requirements. [CEDS Element: High School Diploma Type, ID:000138]

RefHighSchoolGraduationRateIndicator	An indication of whether the school or district met the High School Graduation Rate requirement in accordance with state definition for the purposes of determining AYP. [CEDS Element: High School Graduation Rate Indicator Status, ID:000140]
RefHomelessNighttimeResidence	The primary nighttime residence of the students at the time the students are identified as homeless. [CEDS Element: Homeless Primary Nighttime Residence, ID:000146]
RefIDEADisciplineMethodFirearm	The methods used to discipline students who are children with disabilities (IDEA) involved in firearms and other outcomes of firearms incidents. [CEDS Element: IDEA Discipline Method for Firearms Incidents, ID:000556]
RefIDEAEducationalEnvironmentEC	The program in which children ages 3 through 5 attend and in which these children receive special education and related services. [CEDS Element: IDEA Educational Environment for Early Childhood, ID:000559]
RefIDEAEducationalEnvironmentSchoolAge	The setting in which children ages 6 through 21, receive special education and related services. [CEDS Element: IDEA Educational Environment for School Age, ID:000535]
RefIDEAEnvironmentEL	The program in which children ages 3 through 5 attend and in which these children receive special education and related services. [CEDS Element: IDEA Educational Environment for Early Childhood, ID:000559]
RefIDEAIEPStatus	The status of an individualized services plan for a specified reporting period or on a specified date. [CEDS Element: IDEA IEP Status, ID:001501]
RefIDEAInterimRemoval	The type of interim removal from current educational setting experienced by children with disabilities (IDEA). [CEDS Element: IDEA Interim Removal, ID:000541]
RefIDEAInterimRemovalReason	The reasons why children with disabilities were unilaterally removed from their current educational placement to an interim alternative educational setting. [CEDS Element: IDEA Interim Removal Reason, ID:000539]

RefImmunizationType	The types of immunizations given to persons.
RefIncidentBehavior	Categories of behavior coded for use in describing an incident. [CEDS Element: Incident Behavior, ID:000509]
RefIncidentBehaviorSecondary	Supplemental information about an incident when the primary offense is more serious in nature than alcohol or drug, etc. offenses. [CEDS Element: Secondary Incident Behavior, ID:000627]
RefIncidentInjuryType	An indication of the occurrence of physical injury to participants involved in the incident and, if so, the level of injury sustained. [CEDS Element: Incident Injury Type, ID:000510]
RefIncidentLocation	Identifies where the incident occurred and whether or not it occurred on campus. [CEDS Element: Incident Location, ID:000617]
RefIncidentMultipleOffenseType	An indication of whether the offense was primary or secondary in nature when a single incident included more than one type of offense. [CEDS Element: Incident Multiple Offense Type, ID:001369]
RefIncidentPerpetratorInjuryType	An indication of the occurrence of physical injury to the perpetrator(s) (participants) involved in the incident and, if so, the level of injury sustained. [CEDS Element: Incident Perpetrator Injury Type, ID:001371]
RefIncidentPersonRoleType	The role or type of participation of a person in a discipline incident. [CEDS Element: Incident Person Role Type, ID:001373]
RefIncidentPersonType	Information on the type of individual who was involved in an incident. [CEDS Elements: Incident Perpetrator Type (001372), Incident Witness Type (001380), Incident Victim Type (001378)]
RefIncidentReporterType	Information on the type of person who reported the incident. When known and/or if useful, use a more specific option code (e.g., "Counselor" rather than "Professional Staff"). [CEDS Element: Incident Reporter Type, ID:000506]

RefIncidentTimeDescriptionCode	A code for the description of the time of day that an incident took place. [CEDS Element: Incident Time Description Code, ID:000515]
RefIncomeCalculationMethod	The calculation method used by a program to determine total family income. [CEDS Element: Income Calculation Method, ID:000334]
RefIncreasedLearningTimeType	The types of increased learning time provided. [CEDS Element: Increased Learning Time Type, ID:000164]
RefIndividualizedProgramDateType	An indication of the significance of a date to an individualized program. [CEDS Element: Individualized Program Date Type, ID:001231]
RefIndividualizedProgramLocation	The place in which a child's service plan meeting is held. [CEDS Element: Individualized Program Service Plan Meeting Location, ID:001237]
RefIndividualizedProgramPlannedServiceType	The types of service that adapts the curriculum, materials, or instruction for students identified as needing special education because of a delay or disability. [CEDS Element: Individualized Program Planned Service Type, ID:001383]
RefIndividualizedProgramTransitionType	The post-school transition plan for the student recorded on their Individualized Education Program. [CEDS Element: Individualized Program Transition Plan Type, ID:001235]
RefIndividualizedProgramType	A designation of the type of program developed for a student. [CEDS Element: Individualized Program Type, ID:000320]
RefInstitutionTelephoneType	The type of communication number listed for an organization. [CEDS Element: Institution Telephone Number Type, ID:000167]
RefInstructionalActivityHours	The unit of measure of student instructional activity. [CEDS Element: Instructional Activity Hours Type, ID:000169]

RefInstructionalStaffContractLength	The contracted teaching period for faculty. [CEDS Element: Instructional Staff Contract Length, ID:000735]
RefInstructionalStaffFacultyTenure	An indicator of the type of faculty status a person has if, by institutional definition, a staff member has faculty status. [CEDS Element: Instructional Staff Faculty Tenure Status, ID:000739]
RefInstructionCreditType	A designation of the type(s) of instruction being delivered by staff whose primary responsibility is instruction. Instruction that is for "credit" can be applied toward the requirements for a postsecondary degree, diploma, certificate or other formal award. [CEDS Element: Instruction Credit Type, ID:000741]
RefInstructionLocationType	The type of location at which instruction or service takes place. [CEDS Element: Receiving Location of Instruction, ID:000524]
RefIntegratedTechnologyStatus	An indication of the extent to which the district has effectively and fully integrated technology, as defined by the state. [CEDS Element: Integrated Technology Status, ID:000170]
RefInternetAccess	The type of internet access available. [CEDS Element: Internet Access, ID:000587]
RefIpedOccupationalCategory	The Integrated Postsecondary Education Data System (IPEDS) occupational categories used to report employees. [CEDS Element: IPEDS Occupational Category, ID:000731]
RefItemResponseTheoryKappaAlgorithm	The algorithm used to derive the Assessment Item Kappa Value [CEDS Element: Assessment Item Response Theory Kappa Algorithm, ID:001266]
RefItemResponseTheoryDifficultyCategory	A category for the difficulty of the item based on the Item Response Theory value. [CEDS Element: Assessment Item Response Theory Parameter Difficulty Category, ID:001253]
RefK12EndOfCourseRequirement	An indication that this course has an end of course examination required by the SEA or LEA. [CEDS Element: K12 End of Course Requirement, ID:001386]

RefK12LeaTitleISupportService	The type of support services provided to students in Title I programs. [CEDS Element: Title I Support Services, ID:000289]
RefK12ResponsibilityType	The type of services/instruction the organization is responsible for the student. [CEDS Elements: Responsible School Type (000595), Responsible School Identifier (000638), Responsible District Type (000594), Responsible District Identifier (000637), Responsible Organization Type (001467)]
RefLanguage	The specific language or dialect that a person uses to communicate. [CEDS Element: Language Code (000317), Learning Resource Language (000919), Language of Session (001388)]
RefLanguageUseType	An indication of the function and context in which a person uses a language to communicate. [CEDS Element: Language Type, ID:000316]
RefLeaFundsTransferType	An indication of the type of transfer for an LEAs that transferred funds from an eligible program to another eligible program. [CEDS Element: Local Education Agency Funds Transfer Type, ID:000451]
RefLeaImprovementStatus	An indication of the improvement stage for AYP of the local education agency (LEA). [CEDS Element: Local Education Agency Improvement Status, ID:000173]
RefLearnerActionType	The type of action taken by the learner. [CEDS Element: Learner Action Type, ID:000934]
RefLearnerActivityMaximumTimeAllowedUnits	The unit of time of the Maximum Time Allowed value. [CEDS Element: Learner Activity Maximum Time Allowed Unit, ID:000945]
RefLearnerActivityType	The type of work assigned to the learner. [CEDS Element: Learner Activity Type, ID:000942]
RefLearningResourceAccessAPIType	Indicates that the learning resource is compatible with the referenced accessibility application programming interface (API). [CEDS Element: Learning Resource Access API Type, ID:001389]
RefLearningResourceAccessHazardType	A characteristic of the described learning resource that is physiologically dangerous to some users. [CEDS Element: Learning Resource Access Hazard Type, ID:001390]

RefLearningResourceAccessModeType	An access mode through which the intellectual content of a described learning resource or adaptation is communicated; if adaptations for the resource are known, the access modes of those adaptations are not included. [CEDS Element: Learning Resource Access Mode Type, ID:001391]
RefLearningResourceBookFormatType	Specifies the format for a learning resource that is a book. Other options may be considered for inclusion in the option set. [CEDS Element: Learning Resource Book Format Type, ID:001394]
RefLearningResourceCompetencyAlignmentType	The alignment relationship between the resource and the competency. [CEDS Element: Learning Resource Competency Alignment Type, ID: 00879]
RefLearningResourceControlFlexibilityType	Identifies a single input method that is sufficient to control the described learning resource. [CEDS Element: Learning Resource Control Flexibility Type, ID:001395]
RefLearningResourceDigitalMediaSubType	The media or file subtype of the digital resource being based on the Media Types and Subtypes, formerly known as MIME types, defined by the Internet Assigned Numbers Authority (IANA). [CEDS Element: Learning Resource Digital Media Sub Type, ID:001396]
RefLearningResourceDigitalMediaType	The media or file type of the digital resource being based on the media types defined by the Internet Assigned Numbers Authority (IANA) at http://www.iana.org/assignments/media-types . [CEDS Element: Learning Resource Digital Media Type, ID:001397]
RefLearningResourceEducationalUse	The purpose of the work in the context of education. [CEDS Element: Learning Resource Educational Use, ID:001002]
RefLearningResourceIntendedEndUserRole	The individual or group for which the resource was produced. [CEDS Element: Learning Resource Intended End User Role, ID:000923]
RefLearningResourceInteractivityType	The predominate mode of learning supported by the learning resource. Acceptable values are active, expositive, or mixed. [CEDS Element: Learning Resource Interactivity Type, ID:000927]
RefLearningResourceMediaFeatureType	Accessible content features included with the learning resource. [CEDS Element: Learning Resource Media Feature Type, ID:001399]

RefLearningResourcePhysicalMediaType	A type of physical media on which the Learning Resource is delivered or available. [CEDS Element: Learning Resource Physical Media Type, ID:001401]
RefLearningResourceType	The predominate type or kind characterizing the learning resource. [CEDS Element: Learning Resource Type, ID:000928]
RefLearningStandardDocumentPublication Status	The publication status of the document. [CEDS Element: Learning Standard Document Publication Status, ID:000698]
RefLearningStandardItemAssociationType	Defines the nature of the association between a Learning Standard Item and an associated data object such as a Learning Resource, an Assessment Item, or even another Learning Standard Item. [CEDS Elements: Learning Standard Item Association Type (000869), Learning Resource Competency Alignment Type (000879)]
RefLearningStandardItemNodeAccessibility Profile	When the Learning Standard Item is used as a node in a learning map, this element supports alternative pathways based on a learner's accessibility profile. The type selected indicates which accessibility profile the node is designed to address. [CEDS Element: Learning Standard Item Node Accessibility Profile, ID:001408]
RefLearningStandardItemTestabilityType	Indicates if the competency described in the Learning Standard Item Statement can be tested using one or more assessment items. [CEDS Element: Learning Standard Item Testability Type, ID:001411]
RefLeaType	The classification of education agencies within the geographic boundaries of a state according to the level of administrative and operational control. [CEDS Element: Local Education Agency Type, ID:000537]
RefLeaveEventType	The type of the leave event. [CEDS Element: Leave Event Type, ID:000624]

RefLevelOfInstitution	A classification of whether a postsecondary institution's highest level of offering is a program of 4-years or higher (4 year), 2-but-less-than 4-years (2 year), or less than 2-years. [CEDS Element: Level of Institution, ID:000178]
RefLicenseExempt	The program or center is legally exempt from licensing. [CEDS Element: License Exempt, ID:000350]
RefLiteracyAssessment	The type of literacy test administered. [CEDS Element: Literacy Assessment Administered Type, ID:000466]
RefMagnetSpecialProgram	A school that has been designed: 1) to attract students of different racial/ethnic backgrounds for the purpose of reducing, preventing, or eliminating racial isolation; and/or 2)to provide an academic or social focus on a particular theme (e.g., science/math, performing arts, gifted/talented, career academy or foreign language). [CEDS Element: Magnet or Special Program Emphasis School, ID:000181]
RefMedicalAlertIndicator	Medical/health condition alert indicators.
RefMepEnrollmentType	The type of school/migrant education project in which instruction and/or support services are provided. [CEDS Element: Migrant Education Program Enrollment Type, ID:000437]
RefMepProjectBased	Indicates the type of MEP project based on the location where the MEP services are held. [CEDS Element: Migrant Education Program Project Based, ID:000440]
RefMepProjectType	Type of project funded in whole or in part by MEP funds. [CEDS Element: Migrant Education Program Project Type, ID:000463]
RefMepServiceType	The type of services received by participating migrant students in the migrant education program (MEP). [CEDS Element: Migrant Education Program Services Type, ID:000186]
RefMepSessionType	The time of year that a Migrant Education Program operates. [CEDS Element: Migrant Education Program Session Type, ID:000187]

RefMepStaffCategory	Titles of employment, official status, or rank of staff working in the Migrant Education Program (MEP). [CEDS Element: Migrant Education Program Staff Category, ID:000188]
RefMethodOfServiceDelivery	The method by which the services will be provided. [CEDS Element: Method of Service Delivery, ID:001510]
RefMultipleIntelligenceType	Classification of the Learning Standard Item using intelligences defined for Howard Earl Gardner's Theory of Multiple Intelligences. [CEDS Element: Learning Standard Item Multiple Intelligence, ID:000876]
RefNaepAspectsOfReading	Aspects of reading defined by the National Assessment of Educational Progress (NAEP 2005b Framework). [CEDS Element: NAEP Aspects of Reading, ID:001122]
RefNaepMathComplexityLevel	Complexity levels defined by the National Assessment of Educational Progress (NAEP 2005a Framework). [CEDS Element: NAEP Mathematical Complexity Level, ID:001088]
RefNCESCollegeCourseMapCode	A taxonomy system for coding postsecondary courses in NCES research studies. [CEDS Element: NCES College Course Map Code, ID:001414]
RefNeedDeterminationMethod	The methodology used to determine an individual's financial need. [CEDS Element: Financial Need Determination Methodology, ID:001224]
RefNeglectedProgramType	The type of program under ESEA Title I, Part D, Subpart 1 (state programs) or Subpart 2 (LEA). [CEDS Element: Neglected or Delinquent Program Type, ID:000194]
RefNonPromotionReason	The primary reason as to why a staff member determined that a student should not be promoted (or be demoted). [CEDS Element: Nonpromotion Reason, ID:000531]
RefNonTraditionalGenderStatus	An indication of whether CTE participants were members of an underrepresented gender group (where one gender comprises less than 25 percent of the persons employed in those occupations or field of work). [CEDS Element: Career Technical Education Nontraditional Gender Status, ID:000588]

RefOperationalStatus	Organization operating status values. [CEDS Elements: School Operational Status (000533), Local Education Agency Operational Status (000174), Organization Operational Status (001418)]
RefOperationalStatusType	List of identification system types.
RefOrganizationElementType	List of identification system types.
RefOrganizationIdentificationSystem	A coding scheme that is used for identification and record-keeping purposes by an organization. [Organization Identification System (000827), Adult Education Service Provider Identification System (000781), Agency Course Identifier (001280), Course Code System (000056), Federal School Code (000111), Institution IPEDS UnitID (000166), Local Education Agency Identification System (001072), Local Education Agency Supervisory Union Identification Number (000175), Office of Postsecondary Education Identifier (000203), School Identification System (001073), State Agency Identification System (001491), Course Section Number (001315)]
RefOrganizationIdentifierType	List of identification system types.
RefOrganizationIndicator	The types of indicators (items with a Yes/No option set) for an organization. [CEDS Elements: Advanced Placement Course Self Selection (000017), Shared Time Indicator (000257), Virtual Indicator (001160), Ability Grouping Status (000328)]
RefOrganizationLocationType	The types of addresses for a organization.
RefOrganizationMonitoringNotifications	Whether the organization received notification about monitoring [CEDS Element: Organization Monitoring Notifications, ID:001330]
RefOrganizationRelationship	The type of relationship of one organization to another.
RefOrganizationType	The type of educational organizations or entities. [Multiple CEDS Elements: Organization Type (001156), Adult Education Provider Type (001078)]

RefOtherNameType	The types of previous, alternate or other names for a person. [CEDS Element: Other Name Type, ID:000634]
RefOutcomeTimePoint	The point in time for which the result is used for an outcome measure. [CEDS Element: Early Learning Outcome Time Point, ID:001503]
RefParaprofessionalQualification	An indication of whether paraprofessionals are classified as qualified for their assignment according to state definition. [CEDS Element: Paraprofessional Qualification Status, ID:000207]
RefParticipationStatusAyp	An indication of whether the school or district met the 95 percent participation requirement in the subject assessment in accordance with state definition for the purposes of determining AYP. [CEDS Elements: Participation Status for Math (000208), Participation Status for Reading and Language Arts (000209)]
RefParticipationType	Identifies the code or additional attribute that further defines the individual's participation in the program. [CEDS Elements: Kindergarten Program Participation Type (000714), GED Preparation Program Participation Status (000120), Career Pathways Program Participation Indicator (001291), Correctional Education Reentry Services Participation Indicator (001297)]
RefPDActivityApprovedFor	Reference may be made to state or national content standards covered in the course. [CEDS Element: Professional Development Activity Approved For, ID:001433]
RefPDActivityCreditType	The type of credit awarded. [CEDS Element: Professional Development Activity Credit Type, ID:001436]
RefPDActivityEducationLevelsAddressed	An age group or education level to which the professional development Activity's content pertains. [CEDS Element: Professional Development Activity Education Levels Addressed, ID:001279]
RefPDActivityLevel	An indicator of the level of a professional development activity on the beginner to advanced continuum. [CEDS Element: Professional Development Activity Level, ID:001439]

RefPDActivityTargetAudience	A categorization of the audience for which the professional development activity is intended. [CEDS Element: Professional Development Activity Target Audience, ID:001492]
RefPDActivityType	The indication of the type of professional development activity. [CEDS Element: Professional Development Activity Type, ID:001442]
RefPDAudienceType	The type of audience for the professional development activity. [CEDS Element: Professional Development Audience Type, ID:001430]
RefPDDeliveryMethod	The method by which a session is delivered [CEDS Element: Professional Development Delivery Method, ID:001431]
RefPDInstructionalDeliveryMode	The primary setting or medium of professional development delivery. [CEDS Element: Professional Development Instructional Delivery Mode, ID:001458]
RefPDSessionStatus	The current status of a professional development session [CEDS Element: Professional Development Session Status, ID:001457]
RefPersonAllInformationVerification	The evidence by which a person's name, address, date of birth, etc. is confirmed. [CEDS Element: Personal Information Verification, ID:000618]
RefPersonIdentificationSystem	The types of person identifiers. [CEDS Elements: Child Identification System (ID:000785), Social Security Number (ID:000259), Staff Member Identification System (ID:001074), Student Identification System (ID:001075)]
RefPersonIdentifierType	List of identification system types.
RefPersonLocationType	The type of address for a person. [CEDS Elements: Address Type for Learner or Family (000010), Address Type for (000722)]
RefPersonRelationship	The nature of a person's relationship to another person.

RefPersonStatusType	Status types for a person where the possible condition is either Yes (True) or No (False). [CEDS Element IDs: Economic Disadvantage Status (000081), IDEA Indicator (000151), Migrant Status (000189), Single Parent Or Single Pregnant Woman Status (000580)]
RefPersonTelephoneNumberType	Types of telephone numbers for a person.
RefPopulationServed	The population served by the program, class, organization, etc. [CEDS Element: Special Circumstances Population Served, ID:000852]
RefPreAndPostTestIndicator	An indication of whether students took both a pre-test and a post-test to measure academic improvement. [CEDS Element: Pre and Post Test Indicator, ID:000571]
RefPredominantCalendarSystem	The method by which an institution structures most of its courses for the academic year. [CEDS Element: Predominant Calendar System, ID:000729]
RefPreKEligibleAgesNonIDEA	The ages of children not served under IDEA to whom the LEA's pre-kindergarten services are available. [CEDS Element: Pre-kindergarten Eligible Ages for Non-IDEA Students, ID:000217]
RefPrekindergartenEligibility	The groups of students for whom pre-kindergarten programs are available. [CEDS Element: Pre-kindergarten Eligibility, ID:000216]
RefPresentAttendanceCategory	The category that describes how the student spends his or her time when attending an instructional program approved by the state and/or school. [CEDS Element: Present Attendance Category, ID:000600]
RefProfessionalDevelopmentFinancialSupport	The type of financial assistance received in support of non-credit professional development activities. [CEDS Element: Professional Development Financial Support Type, ID:000812]

RefProfessionalEducationJobClassification	A general job classification that describes staff that performs duties requiring a high degree of knowledge and skills generally acquired through at least a baccalaureate degree (or its equivalent obtained through special study and/or experience) including skills in the field of education, educational psychology, educational social work, or an education therapy field. [CEDS Element: Professional Educational Job Classification, ID:000220]
RefProfessionalTechnicalCredentialType	An indicator of the category of credential conferred by a state occupational licensing entity or industry organization for competency in a specific area measured by a set of pre-established standards. [CEDS Element: Professional or Technical Credential Conferred, ID:000783]
RefProficiencyStatus	An indication of whether a student's scores were proficient. [CEDS Element: Proficiency Status, ID:000573]
RefProficiencyTargetAyp	An indication of whether the school or district met the proficiency target in accordance with state definition for the purposes of determining AYP. [CEDS Elements: Proficiency Target Status for Math (000221), Proficiency Target Status for Reading and Language Arts (000553)]
RefProgramDayLength	The portion of a day that a program is provided to the students it serves. [CEDS Elements: Kindergarten Daily Length (000491), Prekindergarten Daily Length (000490)]
RefProgramExitReason	The documented or assumed reason a student is no longer being served by a special program. [CEDS Element: Exit Reason, ID:000222]
RefProgramGiftedEligibility	State/local code used to determine a student's eligibility for Gifted/Talented program. [CEDS Element: Program Gifted Eligibility Criteria, ID:001244]
RefProgramLengthHoursType	The type of hours (credit or contact) by which the normal length of a program of study is measured. [CEDS Element: Program Length Hours Type, ID:000224]

RefProgramSponsorType	A type of organization providing funds for a particular educational or service program or activity or for an individual's participation in the program or Session. [CEDS Element: Program Sponsor Type, ID:000716]
RefProgramType	The system outlining instructional or non-instructional activities and procedures designed to accomplish a predetermined educational objective or set of objectives or to provide support services to a person and/or the community. [CEDS Elements: Program Type (000225)]
RefProgressLevel	The amount of progress shown in academic subjects. [CEDS Element: Progress Level, ID:000561]
RefPromotionReason	The nature of the student's promotion or progress at the end of a given school term. [CEDS Element: Promotion Reason, ID:000530]
RefProofOfResidencyType	An accepted form of proof of residency in the district/county/other locality. [CEDS Element: Proof of Residency Type, ID:000305]
RefPsEnrollmentAction	The action taken with respect to postsecondary enrollment by the student who graduated from the school, LEA or state in the past two years. [CEDS Element: Postsecondary Enrollment Action, ID:000586]
RefPsEnrollmentAwardType	An indicator of the award level in which the person is currently enrolled. [CEDS Element: Enrollment in Postsecondary Award Type, ID:000361]
RefPsEnrollmentStatus	An indication of the student's enrollment status for a particular term as defined by the institution [CEDS Element: Postsecondary Enrollment Status, ID:000096]
RefPsEnrollmentType	An indicator of the enrollment type associated with the enrollment award level of a person at the beginning of a term. [CEDS Element: Postsecondary Enrollment Type, ID:000095]

RefPsLepType	The term "individual with limited English proficiency" means a secondary school student, an adult, or an out-of-school youth, who has limited ability in speaking, reading, writing, or understanding the English language AND whose native language is a language other than English; OR who lives in a family or community environment in which a language other than English is the dominant language. [CEDS Element: Limited English Proficiency - Postsecondary, ID:000179]
RefPsStudentLevel	Classification of a person enrolling in credit-granting courses at a postsecondary institution since completing high school (or its equivalent) as either an undergraduate or graduate student. [CEDS Element: Student Level, ID:000272]
RefPublicSchoolChoiceStatus	An indication of whether the LEA was able to implement the provisions for public school choice under Title I, Part A, Section 1116 of ESEA as amended. [CEDS Element: Public School Choice Implementation Status, ID:000227]
RefPublicSchoolResidence	An indication of the location of a persons legal residence relative to (within or outside) the boundaries of the public school attended and its administrative unit. [CEDS Element: Public School Residence Status, ID:000532]
RefPurposeOfMonitoringVisit	The purpose for the monitoring visit. [CEDS Element: Purpose of Monitoring Visit, ID:001333]
RefQrisParticipation	Program site participates in a Quality Rating and Improvement System (QRIS). [CEDS Element: Quality Rating and Improvement System Participation, ID:000357]
RefRace	The name used to describe a group of persons related by common descent or heredity
RefReapAlternativeFundingStatus	An indication that the local education agency (LEA) notified the state of the LEA's intention to use REAP-Flex Alternative Uses of Funding Authority during the school year as specified in the Title VI, Section 6211 of ESEA as amended. [CEDS Element: Rural Education Achievement Program Alternative Funding Status, ID:000560]

RefReasonDelayTransitionConf	The reasons for the delay of a transition conference. [CEDS Element: Reason for Delay of Transition Conference, ID:001521]
RefReconstitutedStatus	An indication that the school was restructured, transformed or otherwise changed as a consequence of the state's accountability system under ESEA or as a result of School Improvement Grants (SIG). [CEDS Element: Reconstituted Status, ID:000230]
RefReferralOutcome	The outcome of the referral. [CEDS Element: Referral Outcome, ID:001482]
RefRestructuringAction	The types of actions being implemented in Title I schools as a result of the school being in an improvement status of restructuring – year 2 (implementation year). [CEDS Element: Restructuring Action, ID:000232]
RefRlisProgramUse	The type of use of the Rural Low-Income Schools Program (RLIS) (Title VI, Part B, Subpart 2) Grant Funds. [CEDS Element: Type of Use of the Rural Low-Income Schools Program, ID:000486]
RefRoleStatus	The types of status values for a person's role with an organization.
RefSCEDCourseLevel	The course's level of rigor. [CEDS Element: School Codes for the Exchange of Data Course Level, ID:001516]
RefSCEDCourseSubjectArea	The intended major subject area of the education course. [CEDS Element: School Codes for the Exchange of Data Course Subject Area, ID:001518]
RefSchoolFoodServiceProgram	An indication of a student's participation in free, reduced price, full price breakfast, lunch, snack, supper, and milk programs. [CEDS Element: Participation in School Food Service Programs, ID:000325]
RefSchoolImprovementFunds	An indication of whether the school received funds under Section 1003 of ESEA, as amended. [CEDS Element: School Improvement Funds Status, ID:000238]

RefSchoolImprovementStatus	An indication of the improvement stage of the school. [CEDS Element: School Improvement Status, ID:000240]
RefSchoolLevel	An indication of the level of the education institution. [CEDS Element: School Level, ID:000241]
RefSchoolType	The type of education institution as classified by its primary focus. [CEDS Element: School Type, ID:000242]
RefScoreMetricType	The specific method used to report the performance and achievement of the assessment. This is the metric that is being used to derive the scores. [CEDS Element: Assessment Subtest Score Metric Type, ID:000369]
RefServiceFrequency	The frequency that a service is planned to be provided. [CEDS Element: Individualized Program Planned Service Frequency, ID:001519]
RefServiceOption	Nature of program, class or group in which a person is enrolled. [CEDS Element: Service Option Variation, ID:000353]
RefServices	A service provided to a person in any of the P-20 and workforce domains.
RefServiceSetting	The setting in which a person receives services. [CEDS Elements: Early Intervention or Special Education Services Setting (ID:000322)]
RefSessionType	A prescribed span of time when an education institution is open, instruction is provided, and students are under the direction and guidance of teachers and/or education institution administration. A session may be interrupted by one or more vacations. [CEDS Element: Session Type, ID:000254]
RefSex	The concept describing the biological traits that distinguish the males and females of a species. [CEDS Element: Sex, ID:000255]

RefSigInterventionType	The type of intervention used by the school under the School Improvement Grant (SIG). [CEDS Element: School Improvement Grant Intervention Type, ID:000239]
RefSingleSexClassStatus	Class in a co-educational school where only male or only female students are permitted to take the class. [CEDS Element: Class Section Single Sex Class Status, ID:000258]
RefSpaceUseType	The primary use of a space, as determined by its physical layout and built-in systems and equipment, regardless of its original design. [CEDS Element: Facility Space Use Type, ID:001208]
RefSpecialEducationAgeGroupTaught	The age range of special education students taught. [CEDS Element: Special Education Age Group Taught, ID:000564]
RefSpecialEducationExitReason	The reason children who were in special education at the start of the reporting period were not in special education at the end of the reporting period. [CEDS Element: Special Education Exit Reason, ID:000260]
RefSpecialEducationStaffCategory	Titles of personnel employed and contracted to provide related services for children with disabilities. [CEDS Element: Special Education Staff Category, ID:000558]
RefStaffPerformanceLevel	The levels used in district evaluation systems for assigning teacher or principal performance ratings. [CEDS Element: Faculty and Administration Performance Level, ID:000589]
RefStandardizedAdmissionTest	The type of test prepared and administered by an agency that is independent of any postsecondary education institution and is typically used for admissions purposes. Tests provide information about prospective students and their academic qualifications relative to a national sample. [CEDS Element: Standardized Admission Test Type, ID:000266]
RefState	A state or outlying region where an address is located.
RefStateANSICode	The American National Standards Institute (ANSI) two-digit code for the state. [CEDS Element: State ANSI Code, ID:000424]

RefStatePovertyDesignation	The designation of a school's poverty quartile for purposes of determining classes taught by highly qualified teachers in high and low poverty schools, according to state's indicator of poverty. [CEDS Element: State Poverty Designation, ID:000585]
RefStudentSupportServiceType	Type of related or ancillary services provided to a person or a group of persons within the formal educational system or offered by an outside agency that provides non-instructional services to support the general welfare of students. This includes physical and emotional health, the ability to select an appropriate course of study, admission to appropriate educational programs, and the ability to adjust to and remain in school through the completion of programs. In serving a student with an identified disability, related services include developmental, corrective, or supportive services required to ensure that the person benefits from special education. [CEDS Element: Student Support Service Type, ID:000273]
RefSupervisedClinicalExperience	An indication of whether a person is enrolled in a supervised clinical experience (including student teaching) as part of a teacher preparation program. [CEDS Element: Supervised Clinical Experience, ID:000771]
RefTeacherEducationCredentialExam	The type of examination used to assess teacher candidate's knowledge and skills. [CEDS Element: Teacher Education Credential Exam Type, ID:000773]
RefTeacherEducationExamScoreType	An indication of the type of credential exam associated with a given exam score. [CEDS Element: Teacher Education Credential Exam Score Type, ID:000774]
RefTeacherEducationTestCompany	The name of the company that provides the examination used in the teacher education program. [CEDS Element: Teacher Education Test Company, ID:000766]
RefTeacherPrepCompleterStatus	An indication of whether a person completed a state-approved teacher preparation program. The fact that a person has or has not been recommended to the state for initial certification or licensure may not be used as a criterion for determining who is a program completer. [CEDS Element: Teacher Preparation Program Completer Status, ID:000768]

RefTeacherPrepEnrollmentStatus	An indication of whether a person is pursuing certification as a teacher. [CEDS Element: Teacher Preparation Program Enrollment Status, ID:000767]
RefTeachingAssignmentRole	The role that the Staff Member has been assigned for a Class Section. (A teacher may have the lead responsibility for one section and serve a supporting role for another section of the same course.) [CEDS Element: Teaching Assignment Role, ID:000648]
RefTeachingCredentialBasis	An indication of the pre-determined criteria for granting the teaching credential that a person holds. [CEDS Element: Teaching Credential Basis, ID:000277]
RefTeachingCredentialType	An indication of the category of a legal document giving authorization to perform teaching assignment services. [CEDS Element: Teaching Credential Type, ID:000278]
RefTechnicalAssistanceDeliveryType	The method of delivery of technical assistance received/provided [CEDS Element: Technical Assistance Delivery Type, ID:001494]
RefTechnicalAssistanceType	The type of technical assistance provided [CEDS Element: Technical Assistance Type, ID:001495]
RefTechnologyLiteracyStatus	An indication of the technology literacy of 8th graders. [CEDS Element: Technology Literacy Status in 8th Grade, ID:000566]
RefTelephoneNumberType	The type of communication number listed for a person. [CEDS Element: Telephone Number Type, ID:000280]
RefTenureSystem	An indicator of whether an institution has personnel positions that lead to consideration for tenure. [CEDS Element: Tenure System, ID:000738]
RefTextComplexitySystem	The scaling system used to specify the text complexity of an assessment item. [CEDS Element: Assessment Item Text Complexity System, ID:000907]
RefTimeForCompletionUnits	The unit of measurement for length of time for completion. [CEDS Element: Normal Length of Time for Completion Units, ID:000198]

RefTitleIIIAccountability	An indication of the progress made by a student toward English proficiency. [CEDS Element: Title III Accountability Progress Status, ID:000536]
RefTitleIIILanguageInstructionProgramType	The type of Title III language instructional programs. [CEDS Element: Title III Language Instruction Program Type, ID:000447]
RefTitleIIIProfessionalDevelopmentType	The type of Title III professional development utilized. [CEDS Element: Title III Professional Development Type, ID:000487]
RefTitleIIndicator	An indication that the student is participating in and served by programs under Title I, Part A of ESEA as amended. [CEDS Element: Title I Indicator, ID:000281]
RefTitleIInstructionalServices	The type of instructional services provided to students in ESEA Title I programs. [CEDS Element: Title I Instructional Services, ID:000282]
RefTitleIProgramStaffCategory	Titles of employment, official status, or rank for staff working in a Title I program. [CEDS Element: Title I Program Staff Category, ID:000283]
RefTitleIProgramType	The type of Title I program offered in the school or district. [CEDS Element: Title I Program Type, ID:000284]
RefTitleISchoolStatus	An indication that a school is designated under state and federal regulations as being eligible for participation in programs authorized by Title I of ESEA as amended and whether it has a Title I program. [CEDS Element: Title I School Status, ID:000285]
RefTransferReady	A person who has successfully completed a transfer-preparatory program as defined by the state or by the institution if no official state definition exists. [CEDS Element: Transfer-ready, ID:000296]
RefTuitionResidencyType	A person's residency status for tuition purposes. [CEDS Element: Tuition Residency Type, ID:000297]

RefTuitionUnit	The component for which tuition is being charged. It might be a time period (term, quarter, year, etc.) or it might be an entity of education (course, credit hour, etc.). [CEDS Element: Tuition Unit, ID:000746]
RefUSCitizenshipStatus	An indicator of whether or not the person is a US citizen. [CEDS Element: United States Citizenship Status, ID:000299]
RefVisaType	The types of Visas for a non-US citizen. [CEDS Element: Visa Type, ID:000196]
RefVisionScreeningStatus	Status of an examination used to measure a person's ability to see. [CEDS Element: Vision Screening Status, ID:000308]
RefWageCollectionMethod	Method used for the collection of wage data for an employment record. [CEDS Element: Wage Collection Code, ID:000798]
RefWageVerification	An indication of whether the wage information has been verified. [CEDS Element: Wage Verification Code, ID:000819]
RefWeaponType	Identifies the type of weapon used during an incident. [CEDS Element: Weapon Type, ID:001211]
RefWfProgramParticipation	The type of workforce and employment development program that an individual is participating in. [CEDS Element: Workforce Program Participation, ID:000997]
RefWorkbasedLearningOpportunityType	The type of work-based learning opportunity a student participated in. [CEDS Element: Work-based Learning Opportunity Type, ID:001499]
RequiredImmunization	Immunizations required by an organization or governing body.
Role	The list of roles for a person.
RoleAttendance	Aggregated attendance counts.

RoleAttendanceEvent	The attributes of a person's attendance during a given day.
RoleStatus	Identifies changes to the status of a role.
Rubric	A rubric that may be utilized for scoring an assessment.
RubricCriterion	
RubricCriterionLevel	
ServicesReceived	A service provided to a person in any of the P-20, adult education and workforce domains.
StaffCredential	A credential held by a staff member.
StaffEmployment	Information on employment of a person by an organization.
StaffEvaluation	Evaluation of a staff member's performance.
StaffExperience	Number of years of experience for a staff member.
StaffProfessionalDevelopmentActivity	Information about a person's participation in a professional development activity and outcomes from that participation that may be related to a Professional Development Requirement. The StaffProfessionalDevelopmentActivity may also be more granularly defined as a person's participation in a specific Professional Development Session, indicated by reference.
StaffTechnicalAssistance	
TeacherEducationCredentialExam	The exam and score of a person on a teaching credential exam.
TeacherStudentDataLinkExclusion	List of exclusions to the teacher-student data link to support state and locally defined policies, includes relationship to a teacher-class-section assignment and a student class-section enrollment.
WorkforceEmploymentQuarterlyData	Employment attributes reported for workforce quarterly data.

WorkforceProgramParticipation

Information on a person's participation in a workforce program.