



CEDS-SEDM.org

[SEDM-101 Slides](#)

[SEDM Conceptual Model](#)

[SEDM Logical Model and Maps/Simplified for State Mapping](#)

[SEDM Ontological Model](#)

[ed-fi swagger](#)

The Special Education Data Model (SEDM) is a public domain data model inside of CEDS, built on shared requirements derived from six business drivers, and documented in a Conceptual Model used for governance. SEDM starts with the 178 “golden elements” identified by CIID for Generate ETL and adds an additional set of elements to address the other five business drivers. The SEDM Conceptual model provides computationally actionable logic as CEDS Schema RDF XML and TTL RDF code mapped to ed-fi, SIF, and Generate.

CEDS Conceptual Model



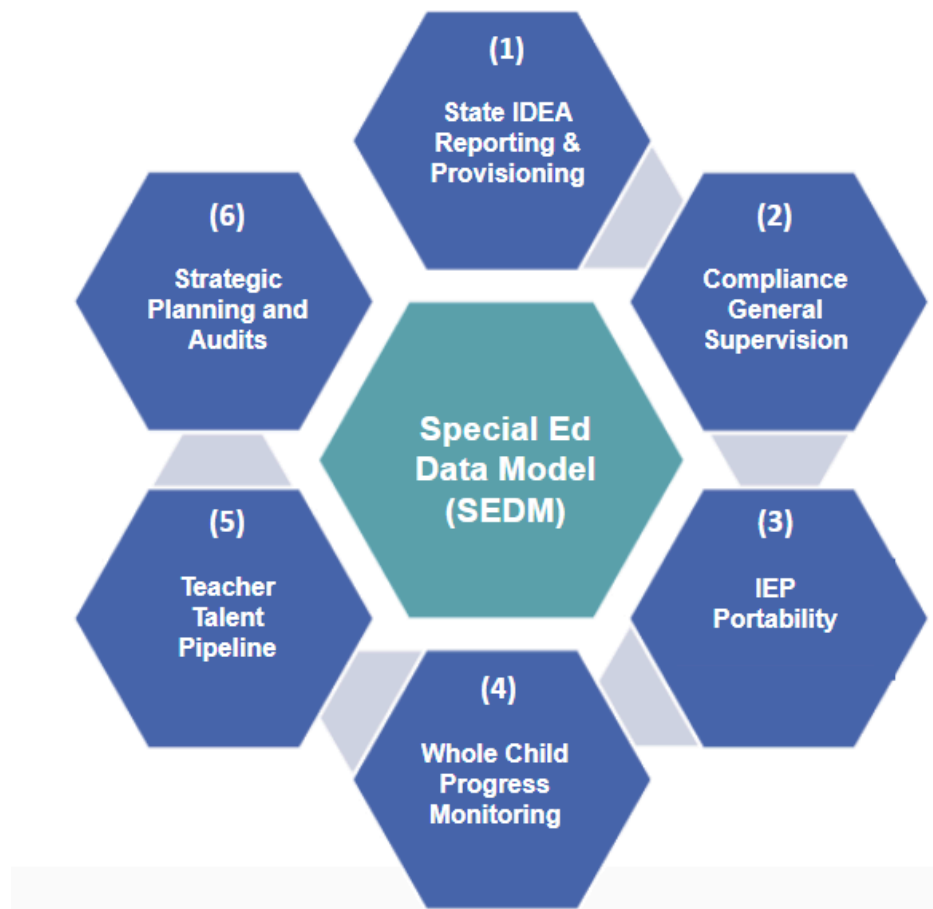
Concept	Definition
Time	A standard representation of a point in time or a duration, used to anchor entities and relationships to temporal context.
Person	A human being, alive or deceased, as recognized by each jurisdiction's legal definitions.
Organization	An organized group of one or more people with a particular purpose.
Resource	Any non-person, non-organization entity that supports or defines learning. It is a broad category encompassing content, tools, and reference definitions.
Membership	The relationship between a person and an organization, expressed as a role held over a defined period of time.
Asset	The relationship formed when a person or organization has ownership, authorship, stewardship, access, or other rights to a resource.
Event	A time-bound occurrence in which people interact with resources within the context of an organization, resulting in a change of state, relationship, or outcome.

Why? Special Ed data remains central to district and state education agency data. Now, more than ever, we need state-led Common Education Data Standards. IDEA passed in 1975, four years before USED was created, and may outlive USED in its current form. The data structures needed to manage special education data create most all core relationships needed for general education and establish a clear need for state-led Common Education Data Standards (CEDS) and State Longitudinal Data Systems.

What is special education? Special education means instruction, services, or programs specially designed to meet the unique needs of students with eligible disabilities. **In 1975 Congress passed the Individuals with Disability Act (IDEA)** and found the following:

“Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities.”

The law states that children with cognitive, physical, emotional and medical conditions are entitled to special services, supports, technologies and individualized planning and goals in order to access **free and appropriate education (FAPE)** in the **least restrictive environment (LRE)**.



What? A focused data model of [237] elements tied to one of six business drivers. The Special Education Data Model (SEDM) is a public domain data model inside of CEDS, built on shared requirements derived from six business drivers, and documented first in a Conceptual Model document that can be used for meaningful governance. SEDM starts with the 178 “golden elements” identified by CIID for Generate ETL and adds an additional ~30 elements to address the other five business drivers. The SEDM Conceptual model provides computationally actionable logic as CEDS Schema RDF XML and TTL RDF code mapped to ed-fi, SIF, and Generate.

This page is a MVP POC for the future of CEDS created by PCG in partnership with AEM, Ed Analytics, [DSU](#) and the [CEDS Sustainability Tiger Team](#). It is a view on data specifications governed elsewhere. It intended to mirror canonical logic maintained by a CEDS Governance structure trusted by states and providers. This view adds context and supports policy governance by field experts:

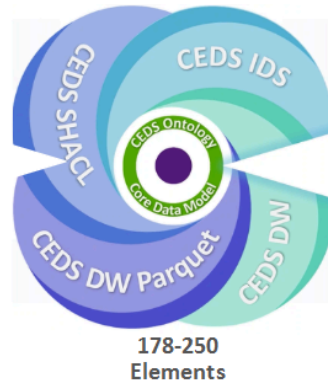
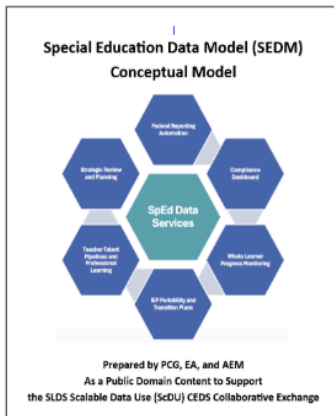
1. Council for Exceptional Children (CEC)
2. Council of Administrators of Special Education (CASE)
3. National Association of State Directors of Special Education (NASDE)

It includes **three main artifacts**:

1. A **conceptual model [Doc](#)** that defines the selected domain written in clear language for SMEs to validate and technical resources to learn from. It is the authoritative policy document controlled and edited by human governance to guide all subsequent work.

2. A **logical model** in [Sheets](#) of normalized entity attributes and system components that define key entities and their relationships to each other. Often the lists in these sheets represent controlled vocabularies and taxonomies of classification.
3. An **ontological model** in [RDF XML](#):
 - a. With tree views of the [abstracted](#) and [normalized](#) CEDS model filtered to SEDM data
 - b. Shapes Constraint Language (SHACL) to enhance the semantic and technical interoperability layers of ontologies expressed as RDF graphs and Apache Parquet to support column-oriented data storage format
 - c. A report output for human consumption to test (QA) and confirm (UAT) that the output matches the approved conceptual model

Special Ed Data Governance



Who? SEDM was initiated by PCG, Ed Analytics (EA), and AEM and is proposed by Ed3 and Data Standards United (DSU) as the 1st official community-Led CEDS WG. The WG's artifacts are also being used to drive changes in ed-fi and SIF.

When?

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Jan 6 OSC Monthly Review 2. Jan 13 G3 3. Jan 14 SEDM@ScDU JSON SHACL 4. Jan 16 SEDM@Ed3 (Zoom) 5. Jan 30 ScDU Reporting 6. Feb 4-7 in DC CEDS/SLDS 7. Feb 13 NCES Data Users 8. Feb 20 SEDM@Ed3 (Zoom) 9. Mar 3 SEDM@CEDS OSC 10. Mar 4 SEDM@CEC 11. Mar 10 SEDM@G3 - Generate Governance Group 12. Mar 11 SEDM@SPARC Center | <ol style="list-style-type: none"> 13. Mar 14 SEDM@ed-fi Data Standards WG 14. Mar 17 SPARC@SEDM 15. Mar 18-19 SEDM@A4L Annual Meeting in DC 16. Mar 20 SEDM@Ed3 (Zoom) 17. Apr 17 SEDM@Ed3 (Zoom) 18. Apr 21 SEDM@ed-fi Tech Cong in Anaheim, CA 19. May 14 SEDM@A4L 20. May 15 SEDM@Ed3 (Zoom) 21. May 16 SEDM@ed-fi DSWG 22. May 20 SEDM@EIMAC in Minneapolis, MN 23. Jun 2 SEDM at CEDS OSC - Submission of Initial Recommendations 24. Begin 90-Day National Review |
|--|--|



SEDM@CEDS OSC - 1st Mon of each month -

SEDM@Ed3 - 3rd Thu of each month - 11AM ET
SEDM@A4L - 2nd and 4th Wed - 3PM ET
SEDM@ed-fi DSWG - monthly
SEDM@Ed-Fi Alliance Summit San Antonio, Oct 6–8
SEDM@EIMAC - San Diego, Oct 30-31

SEDM Submission to CEDS OSC for consideration

Summary

Justification

1. CEDS is a community-led, open source, US standard for P20W+ built off a foundation of common federal reporting requirements.
2. CEDS contains two views of the data normalized and abstracted
3. SEDM follows the same method as CEDS v3: Built on a doc that drives a spreadsheet
4. The first business driver is provisioning and state required reporting
5. The second business driver, “IDEA General Supervision and Compliance” is documented in the Conceptual Model
6. The third business driver of SEDM is IEP portability
7. The CEDS Abstracted (Ontological/IDS)

Summary

1. **SEDM@Ed3** plans to submit to **CEDS OSC** on behalf of **DSU EDU** the following
 - a. **Recommendation 1:** CEDS continues to recognize SEDM@Ed3 as an official field led work group and include and help maintain the [CEDS-SEDM.org](https://ceds-sedm.org) wiki and associated resources.
 - b. **Recommendation 2:** CEDS should edit Element 000903 “Measurable Annual Goals” lift the current 300 character restriction.
 - c. **Recommendation 3:** CEDS should adopt a “SEDM Standard Event Milestone (SSEM)” entity object with the following option set of SSEM Types:

i. Parental Consent for Evaluation Given	x. Parent Complaint (SEA/LEA)
ii. Evaluation Complete	xi. Surrogate Need Identification
iii. Specific Disability Eligibility Determination	xii. Surrogate Assignment
iv. Parental Consent for Implementing IEP Given	xiii. Hearing Officer Assigned
v. Parental Consent for Implementing IEP Decline	xiv. Hearing Conducted
vi. Service Begins	xv. Written Decision (SEA/LEA)
vii. Incident	xvi. Action Taken
viii. Removed from Least Restrictive Environment	xvii. IEP Review Due
ix. Manifestation Determination	xviii. IEP Review Complete
	xix. Transfer Report Completion
	xx. Transfer Student IEP Adoption
	xxi. IEP Parent Consent Withdrawn
	xxii. IEP Completion

Legend	Timeline							IEP			
Transfer							Transfer Report Completion	Transfer Student IEP Adoption			
IDEA Eligible	Referral for Evaluation	Parental Consent for Evaluation	Evaluation Complete	Eligibility Determination						3 Year Eligibility Reevaluation	
IEP Timeline					IEP Approved	Parental Consent for IEP Decline	Parental Consent for IEP Given	IEP Begins	IEP Annual Review Complete	Parental Consent for IEP Withdrawn	IEP Completion
Incident & LRE Removal									Incident	Removed from Least Restrictive	Manifestation Determination
Parent Complaint	Parent Complaint (SEA/LEA)									Written Decision (SEA/LEA)	Resolution of Complaint

4. **Recommendation 4:** CEDS should publish its Ontological Model in a human friendly format and consider the following proposed definitions and relationships for CEDS Ontological Fundamental Classes
 - i. **Time** is a standard way of documenting a point in time, duration between start and end date, or a time period
 - ii. A **person** is a human being, alive or deceased
 - iii. An **organization** is a group that people can be a part of
 - iv. A **role** is a relationship a person has with an organization for a particular period of time
 - v. A **resource** is a digital or physical asset that can be drawn on by a person or organization
 - vi. An **event** is class that has attributes of a person, org, role, or resource that occurred or changed at or over a particular time
2. **SEDM@Ed3** will continue to support and collaborate with **ed-fi** and **A4L** data standards organizations and **state reference implementations**.
3. **SEDM@Ed3** will continue to work with **PARC, CEC, CASE, and NASDE** to help align special ed data with best practices.

Justification

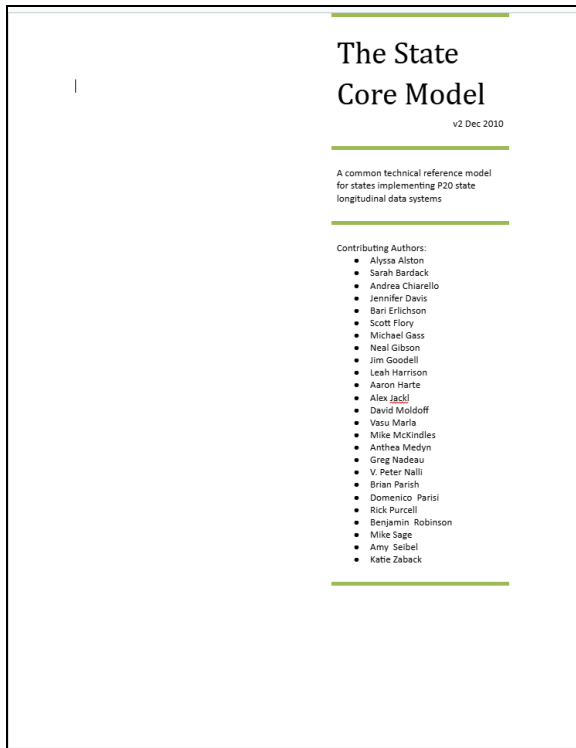
1. **CEDS is a community-led, open source, US standard for P20W+ built off a foundation of common federal reporting requirements.**

State Core Model

1. Defines key concepts, relationships, and logic
2. Built for humans

One Spreadsheet to Rule Them All

1. Lists and metadata
2. Domain Entity Attribute with Def and Option Sets
3. Maps to 625 Federal Reports
4. This work resulted in CEDS v3

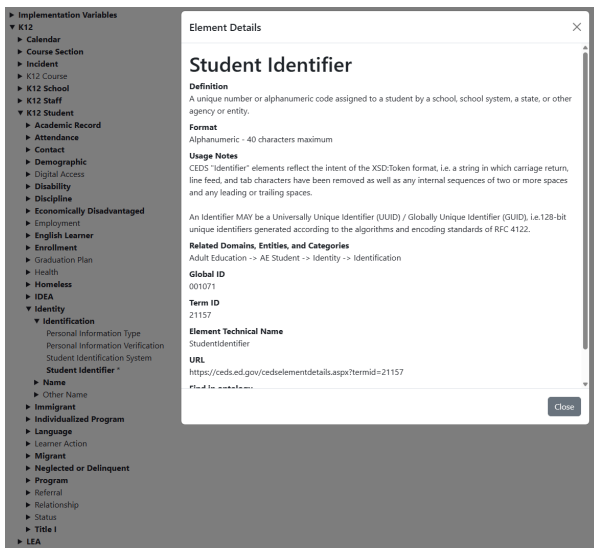


A	B	C	D	E	F
CE	Entity	Attribute	Element	SCM	Definition
Entity	Category	Name	Attribute		
K12	K12 Student	Identity	Student	State Unique	A unique number or alphanumeric code assigned to a student by a school, school system, a
K12	K12 Student	Identity	Identification	State Unique	A coding scheme that is used for identification and record-keeping purposes by schools, social
K12	K12 Student	Identity		Local Identifier	
K12	K12 Student	Identity		Social Security	
K12	K12 Student	Identity	First Name	First Name	The full legal first name given to a person at birth, baptism, or through legal change.
K12	K12 Student	Identity	Last or	Last Name	The full legal last name borne in common by members of a family.
K12	K12 Student	Identity	Middle Name	Middle Name	A full legal middle name given to a person at birth, baptism, or through legal change.
K12	K12 Student	Identity	Generation	Generation Code	An appendage, if any, used to denote a person's generation in his family (e.g., Jr., Sr., III).
K12	K12 Student	Identity	Personal Title	Personal Title	An appellation, if any, used to denote rank, placement, or status (e.g., Mr., Ms., Reverend, Sister).
K12	K12 Student	Identity	Second Last	Second Last	
K12	K12 Student	Identity	Other Name	Other Name	Previous, alternate or other names or aliases associated with the person.
K12	K12 Student	Demographic	Sex	Sex	The concept describing the biological traits that distinguish the males and females of a species.
K12	K12 Student	Demographic	Birthdate	Birthdate	The year, month and day on which a person was born.
K12	K12 Student	Demographic	Years Over Age	Years Over Age	
K12	K12 Student	Demographic	Race Reporting	Race Reporting	
K12	K12 Student	Demographic	Hispanic or	Hispanic	An indication that the person traces his or her origin or descent to Mexico, Puerto Rico, Cuba,
K12	K12 Student	Demographic	American	American Indian	A person having origins in any of the original peoples of North and South America (including
K12	K12 Student	Demographic	Asian	Asian	A person having origins in any of the original peoples of the Far East, Southeast Asia, or the
K12	K12 Student	Demographic	Black or	Black	A person having origins in any of the black racial groups of Africa.
K12	K12 Student	Demographic	Native	Pacific Islander	A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific
K12	K12 Student	Demographic	White	White	A person having origins in any of the original peoples of Europe, Middle East, or North Africa.
K12	K12 Student	Economically	Economic	Economic	An indication that the student met the State criteria for classification as having an economic
K12	K12 Student	Demographic	Home Language	Home Language	The specific language or dialect that students use to communicate at home.
K12	K12 Student	Demographic	City of Birth	City of Birth	The name of the city in which a person was born.
K12	K12 Student	Demographic	State of Birth	State of Birth	The abbreviation for the name of the state (within the United States) or extra-state jurisdiction
K12	K12 Student	Demographic	Country of	Country of Birth	The unique two-digit International Organization for Standardization (ISO) code for the country or
K12	K12 Student	Demographic	Family Size	Family Size	
K12	K12 Student	Enrollment	Enrollment	Enrollment	An indication as to whether a student's name was, is, or will be officially registered on the roll of
K12	K12 Student	Enrollment	School	School	A unique number or alphanumeric code assigned to an institution by a school, school system, a
K12	K12 Student	Enrollment	Entry Date	Member School	The year, month and day on which an individual enters and begins to receive instructional
K12	K12 Student	Enrollment	Member School	Member School	
K12	K12 Student	Enrollment	Local	Member LEA	A unique number or alphanumeric code assigned to a local education agency by a school
K12	K12 Student	Enrollment	Member LEA	Member LEA	
K12	K12 Student	Enrollment	Member LEA	Member LEA	
K12	K12 Student	Enrollment	Identification	School	A coding scheme that is used for identification and record-keeping purposes by schools, social
K12	K12 Student	Enrollment	Identification	LEA	A coding scheme that is used for identification and record-keeping purposes by schools, social
K12	K12 Student	Enrollment	Entry Grade	Entry Grade	The grade level or primary instructional level at which a student enters and receives services in
K12	K12 Student	Enrollment	Retained from	Retained from	

2. CEDS contains two views of the data normalized and abstracted

Normalized - Element Data Dictionary

1. Has **K12 Student**, Not Person
2. Implemented in CEDS DW, Parquet



Abstracted - Ontological Model

1. Has **Person**, Not K12 Student
2. Implemented in CEDS IDS

Class

Person

A person, including Students, Staff and Parents.

Properties

[Has Assessment Personal Needs Profile](#) [class: [Assessment Personal Needs Profile](#)]

[Has Assessment Registration](#) [class: [Assessment Registration](#)]

[Has Assessment Session Staff Role](#) [class: [Assessment Session Staff Role](#)]

[Has Credential Award](#) [class: [Credential Award](#)]

[Has Credential Definition Agent](#) [class: [Credential Definition Agent](#)]

[Has Early Learning Child Demographic](#) [class: [Early Learning Child Demographic](#)]

[Has Early Learning Child Developmental Assessment](#) [class: [Early Learning Child Developmental Assessment](#)]

[Has Early Learning Child Health](#) [class: [Early Learning Child Health](#)]

[Has Early Learning Child Individualized Program](#) [class: [Early Learning Child Individualized Program](#)]

[Has Early Learning Child Outcome Summary](#) [class: [Early Learning Child Outcome Summary](#)]

[Has Early Learning Child Transition Plan](#) [class: [Early Learning Child Transition Plan](#)]

[Has Early Learning Enrollment Other Funding](#) [class: [Early Learning Enrollment Other Funding](#)]

[Has Incident Person](#) [class: [Incident Person](#)]

[Has Individualized Program Service](#) [class: [Individualized Program Service](#)]

[Has Learner Activity](#) [class: [Learner Activity](#)]

[Has Learner Activity](#) [class: [Learner Activity](#)]

[Has Learning Resource Issued](#) [class: [Learning Resource Issued](#)]

[Has Learning Resource Peer Rating](#) [class: [Learning Resource Peer Rating](#)]

[Has Location Address](#) [class: [Location Address](#)]

[Has Person Allergy](#) [class: [Person Allergy](#)]

[Has Person Birth](#) [class: [Person Birth](#)]

[Has Person Birthplace](#) [class: [Person Birthplace](#)]

[Has Person Career Education Plan](#) [class: [Person Career Education Plan](#)]

[Has Person Citizenship](#) [class: [Person Citizenship](#)]

[Has Person Credential](#) [class: [Person Credential](#)]

[Has Person Degree Or Certificate](#) [class: [Person Degree Or Certificate](#)]

[Has Person Demographic Race](#) [class: [Person Demographic Race](#)]

[Has Person Digital Access](#) [class: [Person Digital Access](#)]

[Has Person Disability](#) [class: [Person Disability](#)]

[Has Person Email Address](#) [class: [Person Email Address](#)]

[Has Person Family](#) [class: [Person Family](#)]

[Has Person Health](#) [class: [Person Health](#)]

[Has Person Health Birth](#) [class: [Person Health Birth](#)]

[Has Person Homelessness](#) [class: [Person Homelessness](#)]

[Has Person Identifier](#) [class: [Person Identifier](#)]

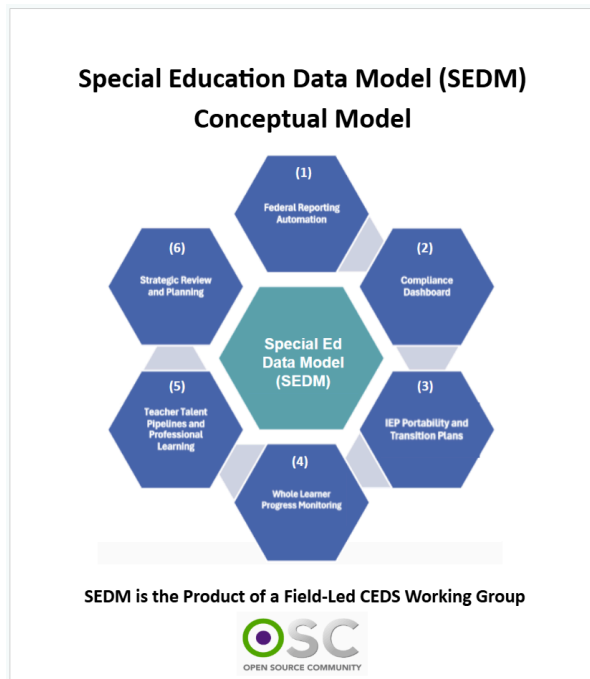
3. SEDM follows the same method as CEDS v3: Built on a doc that drives a spreadsheet

SEDM Conceptual Model

SEDM Logical Model

1. Defines key concepts and relationships
2. Describes six business drivers
 - a. Provisioning and State Required Reporting
 - b. IDEA General Supervision and Compliance
 - c. IEP Portability
 - d. Progress Monitoring
 - e. Teacher Talent Pipeline
 - f. Advanced Analytics

1. Is CEDS
2. Maps to ed-fi, A4L, and specific requirements



SEDM									
File Edit View Insert Format Data Tools Extensions Help									
100% 10 B I									
A1	A	B	C	D	E	F	G	H	I
	Source	Global ID	Domain	Entity	Category	Element Name	Definition	Option Set	
1	Directory	000143	K12	Calendar	Session	School Year	The year for a reported school session.	None	
2	Directory	000603	K12	Calendar	Event	Calendar Event Type	A type of scheduled or unscheduled	EmergencyDay	
3	Directory	001275	K12	Calendar	Event	Calendar Event Date	The date of the scheduled or	None	
4	Directory	001276	K12	Calendar	Event	Calendar Event Day Name	A name used for the day of the calendar	None	
5	Directory	001490	K12	SEA	Identification	State Agency Identifier	A unique number or alphanumeric code	None	
6	Directory	000204	K12	SEA	Identification	Organization Name	The name of a non-person entity such as	None	
7	Directory	001156	K12	SEA	Identification	Organization Type	The type of educational organization or	Employer	
8	Directory	000424	K12	SEA	Address	State AWC Code	The American National Standards	01 - Alabama	
9	Directory	000704	K12	SEA	Contact	Web Site Address	The Uniform Resource Locator (URL) for	None	
10	Directory	000279	K12	SEA	Contact-Telephone	Telephone Number	The telephone number including the area	None	
11	Directory	001068	K12	SEA	Identification	Local Education Agency Identifier	A unique number or alphanumeric code	None	
12	Directory	000206	K12	SEA	Identification	Organization Name	The name of a non-person entity such as	None	
13	Directory	001156	K12	SEA	Identification	Organization Type	The type of educational organization or	Employer	
14	Directory	001066	K12	SEA	Address	Address Type for Organization	The type of address listed for an	Mailing - Mailing	
15	Directory	000269	K12	SEA	Address	Address Street Number and Name	The street number and street name or	None	
16	Directory	000019	K12	SEA	Address	Address Apartment Room or Suite Number	The apartment, room, or suite number of	None	
17	Directory	000040	K12	SEA	Address	Address City	The name of the city in which an address	None	
18	Directory	000267	K12	SEA	Address	State Abbreviation	The abbreviation for the state (within the	AK - Alaska	
19	Directory	000114	K12	SEA	Address	Address Postal Code	A number that identifies each postal	None	
20	Directory	000279	K12	SEA	Telephone	Telephone Number	The telephone number including the area	None	
21	Directory	000167	K12	SEA	Telephone	Institution Telephone Number Type	The type of communication number listed	Main - Main	
22	Directory	000537	K12	SEA	Directory	Local Education Agency Type	The classification of education agencies	Regular/NotInSuper	
23	Directory	000174	K12	SEA	Directory	Local Education Agency Operational Status	The classification of the operational	Open - Open	
24	Directory	000534	K12	SEA	Directory	Operational Status Effective Date	The effective date for a change in	None	
25	Directory	000175	K12	SEA	Directory	Local Education Agency Supervisory Union	The three-digit unique identifier assigned	None	
26	Directory	000039	K12	SEA	Directory	Charter School Indicator	An indication that a public school	Yes	
27	Directory	000704	K12	SEA	Directory	Web Site Address	The Uniform Resource Locator (URL) for	None	
28	Directory	000284	K12	SEA	Programs and Services	Title I Program Type	The type of Title I program offered in the	Targeted/Assistance	
29	Directory	000447	K12	SEA	Programs and Services	Title II Language Instruction Program Type	The type of Title II language instructional	DualLanguage	
30	Directory	001069	K12	K12 School	Identification	School Identifier	A unique number or alphanumeric code	None	
31	Directory	000191	K12	K12 School	Identification	Name of institution	The full legally accepted name of the	None	
32	Directory	001156	K12	K12 School	Identification	Organization Type	The type of educational organization or	Employer	
33	Directory	001066	K12	K12 School	Address	Address Type for Organization	The type of address listed for an	Mailing - Mailing	

4. The first business driver is provisioning and state required reporting

- a. Provisioning is driven by NC and SC public published standards
- b. State reporting is based on CIIDs work with Generate. It is

CID CENTER for the INTEGRATION of IDEA DATA

Home Collaborate

Publication Details

Return

ETL Documentation Template

Summary: Once the decision has been made to integrate IDEA data into the statewide longitudinal data system (SLDS), the technical aspects of extracting the data from its source system, making any transformations in the data to help it align with the target system with which it is being integrated, and the process of loading the data must be developed. This extract, transform, and load (ETL) process must be done correctly for the integrated data to be appropriately available to be utilized. Much thought and consideration needs to go into the ETL for doing the ETL. To assist with this effort, the following template has been developed.

Institution: Center for the Integration of IDEA Data

Publication Year: 2023

Inputs: Data Collection, Assessment, Child Count, Discipline, Personnel, Template, Documentation Step 5, Task 6.1, Task 6.2, Task 6.3, Task 6.4, Task 6.5

Associated Files and URLs:

Name	Description	Type	Download
Assessment ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Base IDEA Checklist.xlsx	Generate v11.0 to current	Microsoft Excel	Download
Child Count ETL Checklist.xlsx	Generate v11.0 to current	Microsoft Excel	Download
Child Count ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Discipline ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Directory ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Discipline ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Exiting ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Membership ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Special Participation ETL Checklist.xlsx	Generate v3.0 to current	Microsoft Excel	Download
OESE ETL Checklist.xlsx	Generate v11.0 to current	Microsoft Excel	Download
Personnel ETL Documentation Template.xlsx	Generate v11.1 to current	Microsoft Excel	Download
Title I ETL Checklist.xlsx	Generate v3.0 to current	Microsoft Excel	Download
Title III ETL Checklist.xlsx	Generate v3.0 to current	Microsoft Excel	Download

K12 -> LEA -> Identification	Local Education Agency Identifier	A unique number or alphanumeric code assigned to measure an institution by a school system, a state, or other agency or entity.	Alphanumeric
School -> Identification	School Identifier	A unique number or alphanumeric code assigned to measure an institution by a school, school system, a state, or other agency or entity.	Alphanumeric
Student -> Identity -> Identification	Student Identifier	A unique number or alphanumeric code assigned to measure a student by a school, school system, a state, or other agency or entity.	Alphanumeric
Student -> Demographic	Sex	The concept describing the biological traits that distinguish the males and females of a species.	Sex
Student -> Demographic	Sex	The concept describing the biological traits that distinguish the males and females of a species.	Sex
Student -> Demographic	Sex	The concept describing the biological traits that distinguish the males and females of a species.	Sex
K12 -> Calendar -> Session	School Year	The year for a reported school session. For academic years that span a calendar year this is the four digit year-end. E.g.	Integer

i. The resulting “178 Golden Elements” unchanged form the foundation for SEDM.

Domain	Entity	Category	Element Name	Definition	Option Set	Format	Global ID	Data Model ID	Assessment ETL	Base IDEA ETL	Charter ETL	Child Count ETL	Discipline ETL	Directory ETL	Exiting ETL	Membership ETL	OESE ETL	Personnel ETL	Title I ETL	Title III ETL	Any ETL template?
K12	K12 Student	Identity-Identification	Student Identifier	A unique number or alphanumeric	None	Alphanumeric - 40 characters	001071	59775	Y	Y	Y			Y	Y	Y	Y		Y	Y	Y
K12	K12 Student	Demographic	Birthdate	The year, month and day on which	None	YYYY-MM-DD	000033	58995									Y	Y	Y	Y	Y
K12	K12 Student	Demographic	Sex	The concept describing the	Male - Male		000255	59811	Y	Y	Y			Y	Y	Y	Y				Y
K12	K12 Student	Demographic	American Indian or Alaska Native	A person having origins in any of	Yes - Yes		000016	59907									Y				Y
K12	K12 Student	Demographic	Asian	A person having origins in any of	Yes - Yes		000020	59908									Y				Y
K12	K12 Student	Demographic	Black or African American	A person having origins in any of	Yes - Yes		000034	59909									Y				Y
K12	K12 Student	Demographic	Native Hawaiian or Other Pacific Islander	A person having origins in any of	Yes - Yes		000192	59910									Y				Y
K12	K12 Student	Demographic	White	A person having origins in any of	Yes - Yes		000301	59911									Y				Y
K12	K12 Student	Demographic	Demographic Race Two or More	A person having origins in any of	Yes		000973	59425									Y				Y
K12	K12 Student	Demographic	Hispanic or Latino Ethnicity	An indication that the person	Yes - Yes		000144	59765	Y	Y	Y			Y	Y	Y	Y		Y	Y	Y
K12	K12 Student	Demographic	Military Connected Student Indicator	An indication that the student's	NotMilitary	C	001576	61933	Y												Y
K12	K12 Student	Demographic	Race	The origins of a person.	AmericanIndian		001943	63548	Y	Y	Y			Y	Y	Y	Y		Y	Y	Y
K12	K12 Student	Enrollment	Responsible District Identifier	The district responsible for specific	None	Alphanumeric - 40 characters	000637	59905									Y	Y	Y	Y	Y
K12	K12 Student	Enrollment	Responsible School Identifier	The school responsible for specific	None	Alphanumeric - 40 characters	000638	59906									Y		Y	Y	Y
K12	K12 Student	Enrollment	Enrollment Entry Date	The month, day, and year on which	None	YYYY-MM-DD	000097	59747	Y		Y			Y	Y	Y	Y				Y
K12	K12 Student	Enrollment	Entry Grade Level	The grade level or primary	IT -		000100	59749				Y		Y	Y	Y	Y		Y	Y	Y
K12	K12 Student	Enrollment	Enrollment Exit Date	The year, month and day on which	None	YYYY-MM-DD	000107	59750	Y		Y			Y	Y	Y	Y		Y	Y	Y
K12	K12 Student	Attendance	Number of Days in Attendance	The number of days a person is	None	Numeric - up to 2 digits	000202	59796									Y				Y
K12	K12 Student	Attendance	Number of Days Absent	The number of days a person is	None	Numeric - up to 2 digits	000201	59795									Y				Y
K12	K12 Student	Attendance	Student Attendance Rate	The number of school days during	None	Numeric - between 0 and 100	000271	59816									Y				Y
K12	K12 Student	Academic Record	Progress Level	The amount of progress shown in	NEGRADE -		000561	59874									Y				Y
K12	K12 Student	Disability	IDEA Indicator	A person having intellectual	Yes		000151	59771	Y	Y	Y			Y	Y	Y	Y		Y	Y	Y
K12	K12 Student	Disability	Disability Status	An indication of whether a person	Yes		000577	59884									Y				Y
K12	K12 Student	Disability	Section 504 Status	Individuals with disabilities who are	Yes		000249	59810									Y				Y
K12	K12 Student	Disability	Primary Disability Type	The major or overriding disability	AUT - Autism		000218	59800		Y	Y			Y							Y
K12	K12 Student	Disability	IDEA Educational Environment	The setting in which children ages 6	RC80 - Inside		000535	59864			Y			Y							Y
K12	K12 Student	IDEA	Program Participation Start Date	The year, month and day on which	None	YYYY-MM-DD	000590	59995	Y	Y	Y					Y					Y
K12	K12 Student	IDEA	Program Participation Exit Date	The year, month and day on which	None	YYYY-MM-DD	000591	59996	Y	Y	Y			Y	Y						Y
K12	K12 Student	IDEA	Special Education Exit Reason	The reason children who were in	HighSchool/DI		000260	59812								Y					Y
K12	K12 Student	Title I	Title I Indicator	An indication that the student is	01 - Public		000281	59821											Y		Y
K12	K12 Student	Discipline	Disciplinary Action Taken	Identifies the consequences of an	03071 - Bus		000488	59855							Y						Y
K12	K12 Student	Discipline	Disciplinary Action Start Date	The year, month and day on which	None	YYYY-MM-DD	000083	59739							Y						Y

ii. No changes proposed by SEDM to CEDS

5. The second business driver, “IDEA General Supervision and Compliance” is documented in the Conceptual Model

- The model established 16 logical compliance categories
- For each category, the language of IDEA is analyzed and specific data requirements inferred

IDEA Statute Citation	Date Related Requirements
§1414. (C); (I); (I) “to determine whether a child is a child with a disability (as defined in 1401 of this title) within 60 days of receiving parental consent for the evaluation , or, if the State establishes a timeframe within which the evaluation must be conducted , within such timeframe; and (II) to determine the educational needs of such child”	- Referral - Parental Notification Parental Consent - Meetings Evaluation Complete - Eligibility Determination (2.3) - IEP Team Convened (2.4)

- This analysis produces a recommendation that 23 dates be standardized

Legend	Timeline							IEP			
Transfer							Transfer Report Completion	Transfer Student IEP Adoption			
IDEA Eligible	Referral for Evaluation	Parental Consent for Evaluation	Evaluation Complete	Eligibility Determination						3 Year Eligibility Reevaluation	
IEP Timeline					IEP Approved	Parental Consent for IEP Decline	Parental Consent for IEP Given	IEP Begins	IEP Annual Review Complete	Parental Consent for IEP Withdrawn	IEP Completion
Incident & LRE Removal									Incident	Removed from Least Restrictive	Manifestation Determination
Parent Complaint	Parent Complaint (SEA/LEA)									Written Decision (SEA/LEA)	Resolution of Complaint

- For best data management, SEDM recommends to CEDS that a SEDM **Standard Event Milestone structure** with 23 types be added to the next published version.

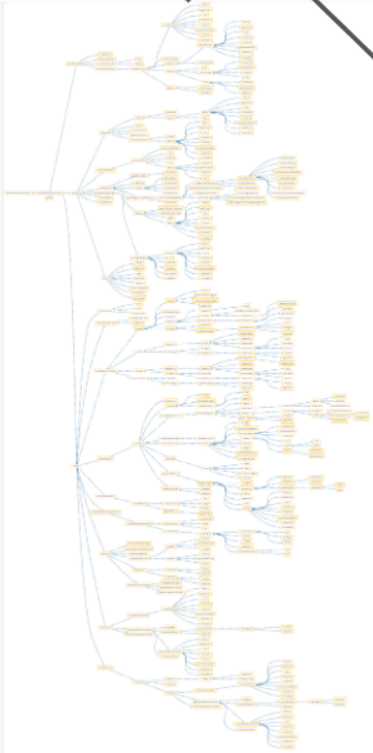
1. Standard Event Milestone

- <id/?title?> (could be an Identifier or a ?Title ?)
 - <date> (could be current Date element like “IEP Start Date”)
 - <description>
 - <type> - [23 types cited in IDEA]
 - Workflow
 - Workflow title: (example “Arkansas SEDM IEP Workflow” or “South Carolina SEDM Parent Complaint Workflow”)
 - Workflow description: (example: “The way Arkansas does IEP”)
 - Precursor milestone: (example: Milestone ID or title)
 - Postcursor milestone:(example: Milestone ID or title)
- If the field agrees, additional SEMs types could be added for logical, but not mandated dates such as referral, parental notification, and IEP meetings (first, last).

6. The third business driver of SEDM is IEP portability

SEDM has identified three starting points for requirements analysis:

1. IDEA
2. MWTM v1
3. SIF xIEP



IDEA §1414. (d); (1); "IEP" means a written statement for each child with a disability that is developed, reviewed, and revised in accordance with this section and that includes—
 (I) a statement of the child's **present levels of academic achievement and functional performance**
 (II) a statement of **measurable annual goals**,
 (III) a description of **how the child's progress toward meeting the annual goals will be measured**
 (IV) a statement of the **special education related services and supplementary aids and services**,
 (V) an explanation of the extent, if any, to which **the child will not participate with nondisabled children in the regular class and in the activities**
 (VI) a statement of any **individual appropriate accommodations** that are necessary to measure the academic achievement and functional performance of the child

MWTM Element	Data Constraints
Student First Name	75 characters maximum
Student Last Name	Alphanumeric - 75 characters
MilitaryRefID	Numerical Sequence or List of IDs
StudentRefID	
Military-Connected Student Identifier	Option Set
Awaiting Initial IDEA Evaluation Status	Yes/No
IDEA Indicator	Yes/No
Disability Status	Yes/No
Section 504 Status	Yes/No
Parent Consent	Yes/No
Date of Parent	MM-DD-YY
Primary Disability Type	Option Set
Disability Condition Type	Option Set
IDEA Educational Environment for School-Age	Option Set
Student Support Service Type	Option Set
IEP Review Date	YYYY-MM
Evaluation Due Date	YYYY-MM
Status End/Exit Date	YYYY-MM
Status Start Date	YYYY-MM

These requirements map to six common required components:

1. Present Levels of Academic Achievement And Functional Performance (PLAAFP)
2. Measurable Annual Goals
3. Progress Monitoring Description
4. Special Education Services
5. Instructional Setting
6. Accommodations

These six required IEP components map to existing CEDS elements:

#	IEP Component	Requirement	Element Name	Definition	Format	CEDS ID
1	Present Levels of Academic Achievement And Functional Performance (PLAAFP)	(I) a statement of the child's present levels of academic achievement and functional performance	IEP Present Level Academic Description	How the child's disability affects the child's academic achievement.	Alphanumeric	001705
			IEP Present Level Functional Description	How the child's disability affects the child's functional performance.	Alphanumeric	001706

2	Measurable Annual Goals	(II) a statement of measurable annual goals,	Goal Description	A statement that describes the desired outcomes.	Alphanumeric - 300 characters maximum	000903
3	Progress Monitoring Description	(III) a description of how the child's progress toward meeting the annual goals will be measured	Goal Measurement Description	The procedures and/or instruments that will be used to measure achievement of a goal or short-term objective.	Alphanumeric	001695
4	Special Education Services	(IV) a statement of the special education related services and supplementary aids and services,	Student Support Service Type	Type of related or ancillary services offered or provided to a person or a group of persons within the formal educational system or by an outside agency which 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.	(See Below)	000273
5	Instructional Setting	(V) an explanation of the extent, if any, to which the child will not participate with nondisabled children in the regular class and in the activities	Service Setting Description	Description of the setting in which the services are delivered.	Alphanumeric	001718
6	Accommodations	(VI) a statement of any individual appropriate accommodations that are necessary to measure the academic achievement and functional performance of the child.	Accommodation Type	The specific accommodation necessary for assessment or instruction.	(See Below)	000385
			Accommodation Other Description	The description of the accommodation when 'Accommodation Type' is set to 'Other'.	Alphanumeric - 30 characters maximum	001157

- a. SEDM recommends that the CEDS Element 000903 Measurable Annual Goals be edited to lift the character restriction.
- b. SEDM seeks guidance from state and local education agency authorities whether additional data available through the 178 Golden Elements (such as homeless, immigrant, etc) should be shared and how parental consent should be managed. SEDM recommends that MWTM adopt SEDM elements in V2 and inform future versions of CEDS, A4L, and ed-fi

7. The CEDS Abstracted (Ontological/IDS)

To accommodate the SEDM Standard Event Milestone, SEDM proposes that CEDS update the ontological model when it is published.

Current CEDS Ontological Model (IDS)

SEDM Proposed Ontological Model

1.



a. CEDS Ontological Fundamental Classes

- i. **Time** is a standard way of documenting a point in time, duration between start and end date, or a time period
- ii. A **person** is a human being, alive or deceased
- iii. An **organization** is a group that people can be a part of
- iv. A **role** is a relationship a person has with an organization for a particular period of time
- v. A **resource** is a digital or physical asset that can be drawn on by a person or organization
- vi. An **event** is class that has attributes of a person, org, role, or resource that occurred or changed at or over a particular time

b. Time

- i. DateTime
- ii. Session/SchoolYear

c. Org Types

- i. **SEA**
- ii. **IDEA Administrative Unit** (LEA, RSA, IU, Ed Collab, BOCES, hospital, corrections)
- iii. **IDEA Delivery Unit** (School)
- iv. **Class Section** (Student(s) + Staff)
- v. **Service Provider**
- vi. **Family** (ESA)

d. Role Types (Person, Org, Role, Time)

- i. **Parent/Guardian**
- ii. **K12 student** - A person who has K12 student membership in an organization from a start date **to** an end date or current.
- iii. **K12 staff**
- iv. **Provider**

e. Event

- i. Enrollment**
- ii. Standard Event Milestone Types (K12 Student, Time)**

f. Resource Types

- i. IEP** - Legal contract between a school district and a family.
- ii. Resource**
 - 1. Accessible Education Materials (AEM) UT State U Cynthia Curry- Center Braille Book
 - 2. Assessment Definition