

Common Education Data Standards (CEDS) and the Assessment Interoperability Framework (AIF)

CEDS is pleased to announce the release of standards to support the assessment systems being developed by the Race to the Top Assessment (RTTA) Consortia. These standards have been developed in conjunction with the SIF Association and IMS, the RTTA Consortia, states not involved in a consortium, and assessment consortia focused on students with severe cognitive disabilities. They support the needs of the Assessment Interoperability Framework (AIF) — specific educational technology and assessment standards that can be used by any assessment implementation provider supporting RTTA.

The CEDS elements can be leveraged to support interoperability between the assessment system's platform and the broader education data systems environment (that is, between all of the systems that make up the assessment system as a whole, and between that assessment system and other data systems like student information systems, SLDSs, LMSs, etc.)

Why should district and state assessment staff care about CEDS?

The AIF is sponsored jointly by two interoperability standards organizations: Schools Interoperability Framework Association (SIF) and IMS Global Learning Consortium (IMS). Any assessment implementation providers supporting RTTA can use the AIF educational technology and assessment standards to enable accurate and comparable creation and delivery of assessments, as well as importing of student and staff data and subsequent reporting of assessment results. CEDS now contains the data entities, elements, and associated metadata necessary to support these assessment system processes. When users align their systems with CEDS, their systems will be also become aligned with AIF.

How will CEDS benefit district and state assessment staff?

Local and state education agencies (LEAs and SEAs) benefit from a common data standard that aligns with the functional needs of the next generation assessment systems being developed by the two consortia. Agencies can look to CEDS as a single source for data standards that allows them to collect the right data in the right formats for implementation of RTTA assessments.

State and local agency staff also benefit from easy and accurate exchange and comparison and understanding of assessment data across systems. But to achieve such communication and comparability, LEAs and SEAs need to speak a common language when it comes to assessments; that is, they need to use the same data elements and standards. CEDS has provided this common vocabulary across a growing portion of the education environment, from early learning through K12 and postsecondary education and into the workforce. With a common vocabulary, sectors are able to share and compare high quality data within and across P-20W sectors.



Having an agreed upon data standard used by the assessment community makes it easier to compare and exchange assessment content and data. When changes are made to the standard, everyone in the assessment community is given ample notice and an opportunity to comment on proposed changes.

How does CEDS fit with SIF and IMS?

AIF is a joint venture of SIF and IMS that builds on the CEDS assessment-related data elements with the specifications for packaging and transport of that data. AIF draws on the strengths of each organization, with the appropriate organization taking responsibility for specification based on the kind of data and the kind of systems interoperating. SIF focuses on data describing the test takers and environment/context of test taking, as well as scoring and test results, while IMS focuses on the delivery of content and accessibility features for test takers. Both aspects of SIF and IMS assessment standards were combined into a common standard that is now supported by CEDS.

CEDS contains the standards (data entities and elements) necessary to support all of the functions of AIF, including the delivery of test content (with accessibility features/accommodations), mapping content to learning standards, linking to institutional and demographic data from state and local data systems, test taker registration, capturing details of the testing environment, scoring tests and test items, and reporting assessment results to local and state administrators.

What can district and state assessment staff do now with CEDS and AIF?

To align with CEDS, district and state assessment staff must determine what elements they have now and what they will need for implementation. CEDS provides two tools that can assist users in determining their assessment readiness: Align and Connect.

CEDS provides a mapping (or gap analysis) tool called Align, which allows users to upload their own data dictionaries and compare them to CEDS and to the dictionaries published by other users of the tool. Assessment staff at the state and local levels can use Align to see which of the necessary data elements they currently collect in a format aligned to CEDS and which elements they will need to start collecting or modify (and to what format) in order to align with the technical requirements of the RTTA assessment systems.

Once entered or loaded into Align, states can "publish" their mapped data dictionaries in order to share them with others in the community. Published maps can then be used with the Connect Tool. The V3 release of this tool in January 2013 will include an AIF Connection. Users can look at the elements needed for AIF and then connect their public map in order to assess readability.