

While education institutions across the P-20W (early learning through postsecondary and workforce) environment use many different data standards to meet information needs, there are certain data we all need to be able to understand, compare and exchange in an accurate, timely and consistent manner. For these, we need a shared vocabulary for education data – that is, we need common education data standards. The **Common Education Data Standards (CEDS)** project is a national collaborative effort to develop voluntary, common data standards for a key set of education data elements to streamline the exchange, comparison and understanding of data within and across P-20W institutions and sectors.

Consider these scenarios...

- A high school student enrolls in a university in another state. Because the high school and university use different data standards, the university registrar cannot transfer the student's transcript information with accuracy, nor can the data be interpreted with confidence.
- A child is enrolled in both Early Intervention and Early Head Start, but the data standard is different for each program and provider agency. Consequently, the regions or states looking to identify the level of access to services are not able to articulate an unduplicated count of high-need children being served in each program.
- •A community college system in one state wants to determine if the percent of its students taking distance learning courses is higher or lower than the percent of students taking distance learning courses in surrounding states. Without a common data standard for distance learning courses, the resulting analysis would likely be flawed since each state could be defining a "distance learning course" differently.
- •A district implements a new teacher observation model as part of its teacher professional development initiative. Because standards for the different elements within the model are not clearly defined prior to its implementation, the data collected and submitted by principals may be inconsistent and therefore unreliable in its usefulness for professional development planning.

In each of these scenarios, lack of clear and consistent data standards results in serious data complications. Had the various data stakeholders been speaking a common vocabulary, they could have better communicated the data with confidence in its accuracy and usefulness.

Why CEDS?

Beyond the basic need for timely and accurate individual student information, the need for a common vocabulary also stems from the changing nature of how education data is being used. No longer is data used by states, districts, and other programs solely for compliance, but instead used to increase student outcomes, share successful teaching practices and create new relationships among stakeholders. Local education agencies (LEAs) and state education agencies (SEAs), as well as many higher education institutions and early learning programs, are improving their data capabilities and implementing longitudinal data systems so that they can effectively use data to make real-time decisions. As the efforts of such a diverse group of data users moves forward, the ability to communicate via a common language becomes vital, allowing education stakeholders – including early childhood educators through postsecondary administrators, parents, students, legislators and researchers – to more efficiently work together toward ensuring student success, using consistent and comparable data throughout all education levels and sectors.

CEDS Benefits Many Types of Stakeholders

As the standards have continued to expand, and more tools have been developed, the list of stakeholders benefitting from CEDS has grown. For example, as data vendors work to meet the needs of data systems in districts and states, many are incorporating the standards into their new products. Researchers are using CEDS as a metadata tool to help them better understand the various administrative datasets, and using CEDS tools to share their analysis in a transparent way. The postsecondary community is adopting the standards in the development of metrics to respond to various policy initiatives aimed at improving postsecondary graduation rates (e.g., Complete College America). Federal agencies are incorporating CEDS into their data collection rules in order to improve the quality and accuracy of their data, and to align different federal collections. As more stakeholders discover how CEDS benefits their work, the number of individuals and institutions speaking a common data vocabulary grows and the reliability and usefulness of the data shared improves.

An Expanding List of Tools: CEDS Align and CEDS Connect

In addition to the Standards, CEDS includes multiple tools to allow stakeholders to use and integrate the Standards into their work.

CEDS Align is a web-based tool that enables users to import or input their data dictionaries, align their elements to CEDS, compare their data dictionaries with those of other users and analyze their data in relation to various other CEDS alignments. CEDS Align is designed to enable education stakeholders to understand how their data dictionaries relate to the Standards, as well as what similarities or gaps might need to be addressed in sharing data among educational sectors and across state lines.

CEDS Connect enables users at different levels to consider "connections" such as metric definitions of data points, policy questions, or federal data reporting requirements by establishing the data elements necessary to answer a given connection, as well as recommend logic and routines for analysis. CEDS Connect is designed to help the education data community work together toward standard definitions and methodologies that will provide common, comparable data measurements and reporting across districts, state and multiple educational agencies. CEDS Connect also allows stakeholders from varied educational organizations can use the tool's myConnect feature that builds upon CEDS Align to apply their Align maps to the elements needed for any connection.

myConnect allows users who have mapped their data systems to CEDS via the Align tool to apply them to a particular CEDS Connection. By using CEDS as a bridge, this allows users to see how the elements in their own data systems might correspond to the elements necessary to answer a particular policy issue or data question.

Explore and Engage with CEDS

To learn more about CEDS, explore the standards at *https://ceds.ed.gov*. CEDS Align will show you how closely your organization's data dictionary matches CEDS and the data standards used by other organizations. Create or view "connections" within CEDS Connect to determine metrics and indicators for different questions and to consider routines for data analysis. Use myConnect to see the data elements in a published Connection side by side with your own data elements.