The Challenge
Multiple state agencies and institutions in North Carolina—and, in fact, every state—contain disparate data systems. Requests for data come from multiple sources and with varying levels of Family Educational Rights and Privacy Act (FERPA) compliant access. The challenge is to create a standard way to understand and manage these requests. Many resources are spent interpreting the request, identifying the data elements required to fulfill the request, and mapping those elements to the data that exist in the source system. Apart from the unlikely possibility of changing all data systems to a single standard, the ideal alternative would be a master data dictionary that spans multiple state education agencies, allows for the agency to retain its unique data standard, and provides alignment of the data elements through a single common standard.

CEDS Can Help
North Carolina’s idea of creating a federated master data dictionary that spans multiple education agencies required the adoption of a nationally recognized education data standard. The North Carolina Department of Public Instruction (NCDPI) selected the Common Education Data Standards (CEDS) to bridge the disparate system elements from each agency. The CEDS Align tool was a major factor in the selection process. Align allows each agency to input its own data dictionary, which retains its unique element name, system, and location while at the same time providing a common element name and definition in the CEDS data standard. Each state agency maintains its own unique Align map in CEDS, and periodically the CEDS team provides NCDPI with a file that is tailored for its specific project. That file is then consumed by “NC School Works,” the system that maintains the master integrated data dictionary.

Through a process that contains levels of secure access to data, individuals and agencies can request data from another agency through the master integrated data dictionary. The common vocabulary allows for understanding across agencies and the alignment to CEDS allows for easier consumption of the data into the destination system. To ensure compliance with all FERPA regulations, the tool used to request the data also handles privacy and security.

Why CEDS
When bringing together two disparate systems, a data standard must either be created or adopted for sharing and transforming data. NCDPI selected CEDS because of the growing recognition of CEDS as a national standard for education data, and because the standard is not proprietary. They believe more and more states and education institutions will move towards varying levels of CEDS adoption, which will only increase the ease of interoperability between existing and newly developed products.

Future Plans
North Carolina plans to continue to improve its master data dictionary. Through communication with the CEDS project team, NCDPI has provided several suggestions for enhancements to the CEDS Align tool. These enhancements will be added to the tool in the upcoming year.

For More Information
For more information on CEDS, visit https://ceds.ed.gov
Join the CEDS community at https://ceds.grads360.org