

Voices from the Field



Virginia

Background. The Commonwealth of Virginia has 1.2 million K12 students in 1,884 schools across the state. These schools are organized into 132 school divisions that range in size from 238 to 174,498 students. Virginia has a long history of strong local control, which presents challenges to collecting data for state and federal purposes.

Evolution of the State Data System.

The work to develop a statewide data system began during the last reauthorization of the Elementary and Secondary Education Act (ESEA) as an accountability system and included development of individual student records and identifiers. Collecting this data opened up the possibility of using data to inform educational decision making, and the Commonwealth began to develop analytic tools and a data warehouse to support its increasing need for data. Between 2004 and 2010, Virginia's system began including information such as student-level state assessment results; college readiness data; SAT, AP and ACT scores; college enrollment and retention information; reading and math performance data; and preschool-level literacy screening results. They also began to collect longitudinal data in 2005 and, for the first time with the class of 2008, were able to publish an accurate, on-time graduation rate. With 11 years of student-level state assessment data available, the Virginia data system now supports school districts to better understand student progress over time – e.g. the characteristics of students who attend and persist in college as well as the characteristics of students who drop out.

Use of SIF and PESC and the Challenges of Sharing Data.

In 2007, Virginia received a federal grant to support additional data in the data warehouse as well as the development of electronic transcript capability. In Virginia, 122 out of 132 school districts use SIF to obtain unique student identifiers.¹

In about 70 of those districts, SIF is also used across departments within the district, meaning data is entered once and then shared – e.g. the student information system can provide student data to the food service and library systems.

Virginia received a grant to implement electronic transcripts in school districts. Currently, 46 districts have electronic transcript capability and more installations are planned. Virginia uses SIF to capture the transcript data from school districts. The data is then translated into PESC format prior to being sent to the transcript broker.² A second Longitudinal Data System (LDS) grant also allowed Virginia to work with all 23 of the Commonwealth's community colleges and three universities (George Mason, James Madison and Norfolk State) to receive electronic transcripts even though they all use different data systems.

The implementation of electronic transcripts solved several challenges. First, information from K12 has traditionally been compiled into a PDF which cannot be used as data in the postsecondary system. Second, the Virginia State Board of Education set a requirement that all transcripts include the State Testing Identifier. Without electronic transcripts, postsecondary institutions had to manually enter the State Testing Identifier in their systems.

The Commonwealth's privacy act precludes the combining of K12, college, and workforce data into a single data store. To resolve this issue, the Department of Education and the State Council on Higher Education for Virginia worked with

¹ The SIF Association brings together the developers and vendors of school technology with the federal, state and local educators who use that technology to support the SIF Specifications that ensure that data systems work together.

² PESC, the Postsecondary Electronic Standards Council, is working to ensure efficient and secure real-time exchange of student data from initial access of the student from high school into the college environment through successful completion of the education experience.

the Attorney General to develop an acceptable way to merge data from various sources while upholding the statute. The participating agencies follow a complex process to de-identify their data which is merged by a third party. The merged data is then returned to each agency for analysis. This process is currently performed in an ad-hoc manner. A 2010 LDS grant will enable the agencies to automate this process in a research portal and make it available to authorized researchers.

An Opportunity for Common Education Data Standards.

Virginia plans to use the Common Education Data Standards (CEDS) in the research portal. A “lexicon” that contains the data elements available to researchers will translate each agency’s data element names and code sets into CEDS format prior to returning data to the researcher.

Governance. Virginia recognized the need to develop a governance structure because all agencies involved have unique issues and their own ideas about how a collaborative system should work. With some funding from their second SLDS grant, Virginia developed a process for establishing system governance that included all of the agencies currently involved – Virginia Department of Education, the State Council on Higher Education for Virginia, the Virginia Community College System and the Virginia Employment Commission. Using an outside facilitator, this cross-agency governance group met offsite over a period of six weeks to discuss questions such as: “Who owns the data?” and “What are the sustainability issues and how will these issues be addressed?” This cross-agency group produced a list of relevant issues and is developing a governance charter. This group also did a best practices study that included interviewing experts and looking at ways in which other state agencies developed similar cross-agency, federated data models.

Conclusion. Virginia began the work of developing a student data system early, which presented some challenges to their ability to share data and use CEDS as laws were passed and systems including specific elements and definitions were established before CEDS. With a commitment to support student achievement from early childhood to college and career, a cross-agency group has leveraged their resources and overcome these challenges to begin effectively sharing data and implementing the Common Education Data Standards.

The CEDS Initiative is made up of stakeholders from all levels and sectors of education in a collaborative effort to develop the Common Education Data Standards. The initiative consists of a two-pronged approach:

- The CEDS Stakeholder Group is coordinated by National Center for Education Statistics (NCES) and is responsible for prioritizing the scope of the CEDS based on community feedback, reviewing existing data definitions and standards, developing new data definitions and standards when necessary, publishing draft CEDS elements for comment, incorporating comments and finalizing each version.
- The CEDS Consortium, facilitated by the Council of Chief State School Officers (CCSSO) and the State Higher Education Executive Officers (SHEEO), participates in the development of the standards and is responsible for their advocacy, communication, adoption and implementation. The Consortium is comprised of representatives from CCSSO, SHEEO, Data Quality Campaign (DQC), SIF Association, Postsecondary Electronic Standards Council (PESC), the Bill and Melinda Gates Foundation and the U.S. Department of Education (ex officio).

The Common Education Data Standards (CEDS) Initiative, a coalition of education stakeholders, is working together in a collaborative effort with the National Center for Education Statistics (NCES) to ensure that common definitions of key data elements become commonly and voluntarily adopted and widely used within and across K12 and postsecondary sectors. CEDS will increase the ability to share and compare data consistently, allowing more informed decision-making at all levels and better educational outcomes for all students through early childhood, K12, postsecondary completion, and the workforce.

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