

Statewide Longitudinal Data System 2019 Grant Summary



Introduction

The Colorado Department of Education (CDE) received a 2019 federal grant to improve Colorado's Statewide Longitudinal Data System (SLDS). This grant award follows two previous SLDS grants in 2007 and 2009 totaling approximately \$21M. Please see SLDS-2007 and 2009 Grants Summary for a summary of previous grant outcomes.

- Applied Sept 2019, awarded Feb 2020
- \$2.3M over 3 years

CDE applied for and received supplementation funding in the amount of \$360,000 in September 2020. The additional opportunity was offered due to the COVID-19 pandemic and its impact on state education operations. Outcomes from these funds must be tied to COVID-19.

Focus Areas for Grant

Infrastructure Modernization

- A new data presentation layer will be developed to help reporting tools communicate with the data warehouse. This upgrade is also necessary for CDE's New SchoolView project.
- CDE will convert to a standardized database model and toolset (CEDS, or Common Education Data Standards) for reporting standardization and interoperability across states.
- This funding allows CDE to automate and standardize more common and less expensive tools, to save money and increase the pool of available technical staff for hiring.
- Supplemental funding adds support for managing remote meeting tools due to workplace changes brought on by the pandemic.

Data Privacy & Data Governance

- Funding allows CDE to build on Colorado's recognized leadership in data privacy processes and methods.
- Utilize already established data sharing agreement formats and data request processes applied to the grant's new use cases.
- CDE's information security success and cyber training will be continued and enhanced.
- CDE has very strong K12 Data Governance (Data Management Committee, Education Data Advisory Committee, active participant in Governors' Data Advisory Board). The grant offers a way to expand those methods and structures to go past the existing structures and bring in external post-academic career partners that house relevant data, e.g., workforce certifications, jobs data, salary information, drivers' license data and others.

Handling of Student Data in SLDS

- Carefully managed longitudinal data enables CDE to make informed educational policy decisions.
- SLDS is activity driven from well-documented use cases.
- The combining and matching of data is only done for the intended use case and associated data.
- Matched data sets are deleted immediately after use case completion and not stored.
- SLDS is a tightly restricted database used by only those with authorization documented by distinct data sharing agreements.

- Include all divisions within CDE which do not normally participate in the established data governance structures to ensure all voices are at the governance table.

Answers Critical Educational Questions

- **Concurrent Enrollment Use Cases**

Why do some LEAs excel at concurrent enrollment while others struggle? For those LEA's that excel, what common student characteristics are shared? For those LEA's that struggle, what common student characteristics are shared?

- **Adult Education Use Cases**

What is the effectiveness of adult basic education services? What are the outcomes (i.e. employment, additional education) of the individuals who are served, such as earned a high school equivalency or industry credential? What are the work outcomes for students beyond high school?

- Information Management Services (IMS) and Student Pathways are partnering to make better use of existing data around adult education and concurrent enrollment students.
- Guided by use cases, CDE will expand existing data sharing agreements with Department of Higher Education and Department of Labor and Employment, and potentially create new agreements with Career and Technical Education (CTE) and/or workforce organizations.
- Throughout this project, IMS will apply established security practices and data privacy knowledge to maintain the highest possible standards in educator and student data security and privacy.
- **Supplemental Use Cases** - Below are possible examples. Note that these funds are tied to COVID impacts and students served by CDE's Adult Education system are disproportionately impacted by the pandemic, allowing many options for use cases.

How does adult participation in family literacy services positively impact their children's outcomes?

How do we bridge between identifiers in disparate systems (e.g. CTE and workforce data sources) to determine successful outcomes in obtaining jobs and/or seeking additional employment?

Summary

CDE's technology matured in the years since the previous SLDS grants, but the broader P20 data governance did not. The United States Department of Education (USDE) will be watching Colorado for improvements in cross agency data governance with this new grant. While CDE had the technology to share and use data for the benefit of education, its full potential was never realized. This grant will enable CDE to fully leverage the technology and the data to benefit education.

CDE learned many lessons from prior experiences in previous SLDS grants and will use that knowledge together with the department's already demonstrated strengths in data privacy and educational leadership. As processes continue to grow and progress in those areas, the team will also strengthen current data sharing and data governance services. Throughout all of this, IMS will be modernizing underlying infrastructure and data reporting systems to more effectively harness the power of the data under CDE's care. All of this together sets CDE up with capabilities to enhance what and how educational data can be reported for a long time to come.