SITE VISIT REPORT

Colorado's Longitudinal Data System

FY09 ARRA SLDS Grantee
(Past FY07 Grantee)

January 18, 2012

SLDS

Statewide
Longitudinal
Data Systems
Grant Program

ies NATIONAL CENTER FOR EDUCATION STATISTICS
Institute of Education Sciences

INTRODUCTION

The Statewide Longitudinal Data Systems (SLDS) Grant Program conducts site visits to its grantee states to assess progress on SLDS grant-funded work, provide technical assistance, and learn best practices. The SLDS team visited the Colorado Department of Education (CDE) on January 18, 2012 to review the state's progress toward the proposed outcomes of CDE's FY09 American Recovery and Reinvestment Act (ARRA) SLDS grant.

HISTORY

Prior to receiving its FY07 SLDS grant, Colorado had already begun work to establish efficient and timely transfer of education information through data exchange. CDE recognized early on that this information has the potential to impact students, parents, teachers, administrators, and districts in their quest for the best possible education-related outcomes, and that unification of data expands the capacity for research.

In 1997, when the Colorado Student Assessment Program (CSAP), began, the testing program madeCDE aware of the need for stakeholders to receive more user-friendly information in more ways. Since then, with assistance from the Legislature, CDE has made substantial strides in building a longitudinal data system. An Education Data Warehouse was created in 2001 and, due to its flexible design, has been expanded yearly. In 2002, a statewide student identifier system was implemented and the Department began collecting identifiable student-level data. In 2005, CDE developed the Colorado Education Data Analysis Reporting system (CEDAR). The CEDAR system is the Department's window into the data warehouse. Utilizing Cognos Business Intelligence software, districts and limited CDE staff have access to tools that allow them to do ad hoc analyses and ad hoc reporting, and that provide access to reports designed by districts.

Colorado received its first SLDS grant in 2007. This grant was called the Longitudinal Education Data Action Plan (LEAP) and was designed to build upon Colorado's already existing accomplishments toward the creation of a longitudinal data system. The FY07 grant was for a total of $4,244,519 and had

a performance period from September 29, 2007 until May 31, 2011, including one year-long, no-cost extension.

With its FY07 SLDS grant, CDE's goal was to enhance its ability to receive and deliver data to stakeholders in a timely manner, and to reduce the burden on school districts who supply the data that is used. To reach this goal, CDE identified three key areas of improvement: data warehouse expansion, automation of transcript and student data between local education agencies (LEAs)and between LEAsand higher-education, and rapid expansion of Local Data Analysis and Reporting.

CDE experienced procurement difficulties during their FY07 grant, which added to the need for a no-cost extension of one year. The extension of the grant funding for a fourth year allowed CDE to complete the work started in the later years of the grant and to mitigate the risk caused by delays in the procurement process for acquiring contractual support. CDE hoped to use the lessons learned regarding procurement for the FY07 grant to help them avoid the same issues in the future. With the no-cost extension, Colorado was able to expend all of its FY07 grant funds and successfully completed the original goals of the grant.

Colorado received its second SLDS grant with ARRA funds in 2009. This grant is called Project SchoolView. The goal of the project is to create a flexible enterprise P-20 information and knowledge management system that will equip users to manage and use information for informed decisionmaking. The grant is divided into three main outcomes:

1. CAPTURE: to ensure that student-focused data are effectively and efficiently collected across multiple data sources, including student information, programmatic classifications, and educator quality;

2. LINK: to ensure that data is effectively shared and exchanged across multiple agencies (Colorado Department of Human Services; K12; Colorado Department of Higher Education; Colorado Department of Labor & Employment; Colorado Department of Corrections; Colorado Department of Public Safety; and district, state, and federal levels) to promote accountability, inform policy, and ensure a holistic view of student success; and

3. PROVIDE: to give stakeholders access to understandable, timely, and reliable information through online content and collaboration tools to inform and improve student performance.

Colorado's applications for Race to the Top (RTT) funding had been designed to build on the foundation of CDE's FY09 ARRA SLDS grant by focusing on building the performance capacity of stakeholders to leverage information to inform development, policy, programs, and practice to drive increased student performance through professional development and improved instructional practices. Though Colorado was not awarded one of the earlier, larger RTT grants, in December 2011 Colorado was awarded a RTT grant for approximately $18 million. Colorado plans to use this money for its new statewide teacher evaluation system.

Federal funding for Colorado's FY09 ARRA SLDS grant totaled $17,409,117. During Year 1 of the grant, CDE spent $930,175.97, which was only 14.83% of its anticipated Year 1 budget. This discrepancy was due to multiple factors. CDE placed the bulk of their originally budgeted Year 1 funding in the Contractual category, but delays in the procurement cycle caused these funds to be under spent during Year 1. In addition, equipment expenditures during Year 1 were also less than originally anticipated because invoicing for the second half of CDE's Oracle enterprise licenses was expected to take place in Year 1 but did not take place until Year 2. CDE anticipates that spending will increase greatly over Year 2 of the grant as the CAPTURE ADE Replacement contract and other larger procurements neared completion, and therefore the unspent funds during Year 1 were reallocated to Year 2. Similarly, until the contracts referenced above have been awarded and the supporting technology is put in place by the vendors, CDE staff members cannot be trained, so funding originally allocated for training of CDE staff during Year 1 of the grant was also reallocated to Year 2 .

CDE has already expressed concerns regarding slower-than-planned procurement related to its FY09 ARRA grant, and has inquired about the possibility of a no-cost extension to offset the delays.

STRENGTHS AND BEST PRACTICES

- CDE has developed a culture of data sharing and data use by providing data back to a variety of stakeholders, including local stakeholders and the public:

  - CDE prepopulates districts' Unified Improvement Plans (UIP) with data from K12 SLDS project.

  - The CDE SchoolView website provides a wide range of detailed information to the public. Visitors to the site can access the Colorado Growth Model data to compare the performance of Colorado schools and districts and gauge their progress. They can also access performance data for all schools and districts across the state. Through the SchoolView site, individuals can search for and access resources related to Colorado's Statewide System of Accountability and Support and can even connect with others to research, discuss, and share facts related to school improvement in Colorado.

  - LEA users report high satisfaction rates with CDE's Datalab tool and state that it greatly assists district users in completing their UIPs.

  - CDE has made Datalab training available to districts and is currently working to develop resources for continuing education such as online videos, online training, and providing direct assistance to district users from a group of UIP experts.

  - CDE has established clear and strategic policies regarding communication with media. Media is given a week to access the data before it goes public and then can work with the CDE communications office if additional clarification is requested to ensure that the information that goes out to public through the media is interpreted and relayed correctly.

- CDE demonstrates a wiliness to share and learn from other states:

  - Colorado is reaping the benefits of sharing its Growth Model. Eighteen other states have used the model, and as these other states have modified the model, Colorado has incorporated some of these improvements into newer versions. Colorado's newest version of its Student Growth Model, scheduled for rollout in late winter 2012, will include new usability enhancements, display enhancements, and additional graphics to present the data.

- Colorado shared its Colorado Growth model with the SLDS team as part of the initial rollout of the Public Domain Clearinghouse (PDC). Later, Colorado was one of the first states to independently upload a tool into the SLDS PDC when it added its Record Integration Tracking System (RITS).
- CDE searches for and leverages other states' work before building completely new documents or systems. For example, Colorado has taken advantage of Georgia's tunneling tool and Kansas's Statewide Standard Course Codes and has adapted these to fit Colorado's specific needs.

- CDE demonstrates responsiveness to stakeholder needs:
  - K12 Stakeholders: CDE is sensitive to the needs of school districts and how these needs vary depending on the size of the school district. CDE allows larger districts that are more advanced to use the state data for their longitudinal data systems and analysis. For smaller districts, CDE provides data and coaching on how to use it. Districts report significantly increased trust in the reliability of data provided by CDE and demonstrate this trust by using the state data for high stakes purposes.
  - P20 Stakeholders: CDE demonstrates investment in organizational change management focused on both participating agencies and districts. CDE plans to create tailored messaging and training for each stakeholder group based on their role and likely barriers to change/adoption, and will identify key metrics for desired behavior change among stakeholders.

- CDE demonstrates an ongoing commitment to thoughtful strategic planning and strives for continuous improvement:
  - CDE has a clearly articulated and succinct vision for its SLDS that is used to plan and carry out work in all areas of its SLDS grant.
  - CDE took lessons learned from FY07, such as inefficient and ineffective processes uncovered in the FY07 grant, and used these in developing the basis of its FY09 grant. Prior to applying for its FY09 ARRA grant, CDE sought stakeholder input by gathering a

team of 30–40 stakeholders from around the state for a day-long, targeted discussion regarding strengths identified and lessons learned during the FY07 SLDS grant. CDE also put out stakeholder surveys and created a map of all existing processes to more clearly identify areas for improvement.

- o CDE focuses on creating repeatable processes to decrease workload and improve sustainability in the long term.

- The Colorado State Legislature has established a P-20 agenda and codified it with legislation such as House Bill 02-1146 and Senate Bill 08-212. Although Colorado does not yet have direct legislative support for the SLDS, P-20 legislative support can provide both focus and political support for the P-20W SLDS effort.

AREAS OF CONTINUED FOCUS AND RECOMMENDATIONS

Several areas of continued focus for Colorado's data system efforts and specific recommendations for steps to be taken to address these areas are listed below.

Focus area 1: Partially implemented P-20W data governance structures and processes

- P-20W data governance structures have not been fully implemented, particularly at the data steward level. The SLDS Executive Steering Committee was just formed in September 2011. Monthly meetings have been held since then, but the group continues to work on planning tasks. Agency representation has been in flux as agencies switch who they send to take part in the group.
- There is a lack of clarity as to how P-20W data governance structures and roles will differ from data governance if the Colorado Information Marketplace (CIM) project is implemented. Assuming CIM happens, the decisionmaking authority and data governance coordination between the two projects will need to be established, including the roles and responsibilities of CDE and Office of Information Technology (OIT) staff. If these roles are not established, there is likelihood of redundant and potentially contradictory work being conducted.

- The SLDS Executive Steering Committee and the State Data Advisory Board are largely IT driven, which reduces the likelihood that the systems will be created in response to policy and programmatic needs, and hence creates a risk to sustainability.

Recommendations:

- Develop and have state leadership of participating agencies approve a data governance policy codifying the purpose, scope, structures, roles, and decisionmaking authority of the P-20W SLDS data governance initiative, including its relationship to the Colorado Information Marketplace and the K12 SLDS. As part of the data governance policy development process, define the distinct roles,responsibilities, and decisionmaking authority of CDE and OIT in the P-20W effort, including representation on the governing and implementation groups.

- Continue efforts to solicit support from partner agency leadership to ensure that appropriate programmatic representatives are identified and actively participate at both the policy and implementation data governance groups (i.e., Executive Steering Committee and Data Management Committee). To date, all partner agencies have participated in governance, but it is crucial that they all are fully engaged in the project to ensure the effort's success.

- Establish a P-20W Data Management Committee comprised of data stewards representing each of the participating partner agencies, as well as relevant IT personnel. Convene this group to guide the LINK PROVIDE components of the initiative.

Focus area 2: Limited partner agency engagement

- Aside from postsecondary, P-20W partner agencies demonstrate a lack of engagement and commitment to the SLDS effort and appear unclear regarding its value proposition to them. This presents a major risk to successful implementation of a P-20W system that serves all agencies' needs and overall program sustainability.

- Lack of engagement by P-20W partners has contributed to other issues such as delays in the creation of P-20W data governance structures and the fact that the critical questions related to these partners have not yet been clearly identified.

- There is not a P20 Council in the state of Colorado. It was established by executive order in April 2007, but was dissolved after the Council fulfilled its initial mission, which included P20

legislation. Given the lack of a state council, there is a need to determine the state-level body responsible for determining the key questions that the P-20W SLDS should address.

Recommendations:

- Conduct outreach to the governor's office and partner agency leadership to articulate the vision and intended outcomes of the P-20W SLDS. Host small group focus sessions with partner agency leadership and staff (separately by role) to identify their policy and programmatic data use needs that could be met by the P-20W SLDS. Ensure that program staff are included in this process so it is not driven by IT.
- Prioritize the data use needs articulated by the partner agencies by generating these analyses early on to demonstrate responsiveness and the value of the P-20W SLDS.

Focus area 3: Limited progress in clearly defining users and uses of the system

- There is no clearly articulated vision for how stakeholders will access and use K12 versus P-20W data.
- The Executive Steering Committee has created a draft set of critical questions that fall under a core set of target areas, which is an important initial step in defining the value proposition and scope of the system. However, there is considerable work to be done to fully define, prioritize, and communicate who the P-20W system will serve, what critical questions it will answer to inform those various stakeholder groups, and how they will be provided access to these data.

Recommendations:

- Continue work to prioritize the critical questions based on the state's policy and programmatic priorities and their cross-sector focus. Ensure that each partner agency's data needs are being addressed by the critical questions. Review the data that will be contributed by each partner agency to ensure the critical questions can be appropriately addressed by the data that will reside in the P-20W SLDS.
- Identify which user group(s) will be served by answering the initial set of critical questions. For each of the critical questions, determine which type(s) of user is the most relevant to (e.g.,

state program administrators, policy makers, local administrators, etc.) and how each type of user will obtain access to information from the P-20W SLDS.

- Create a stakeholder engagement plan for the prioritized user groups that will be served by the P-20W system to identify how the prioritized user groups will be communicated with, and how the prioritized user groups will provide feedback on reports from the system, to ensure that reports from the system meet the prioritized user groups' respective needs.

- Align P-20W critical questions with the research agenda in the state. Work toward developing one overarching research agenda for the state, instead of several research agendas that differ by agency. Think strategically about how agencies can coordinate to ensure consistency regarding what research is done in-house versus that which is done in partnership with external researchers.

- Provide clarification to stakeholders and other users regarding the intended use of SchoolView versus CEDAR. This will serve to decrease the risk of inefficient use of resources due to duplication of functionality within SchoolView and CEDAR, and will decrease the risk of reduced data use among constituents because of confusion over which system to use.

- Make final decisions regarding issues mentioned above so that CDE can close out planning stages of the grant and begin to move forward with work in all areas.

NEXT STEPS

Several items discussed at the site visit are recommended for inclusion in the PDC:

Documents

1) Document detailing how to determine Educator of Record for districts (still in draft form at time of site visit)

2) Documents related to Organizational Change Management work (planned)

Tools

1) BI platform associated with LINK

CDE also had some suggestions for the SLDS team for additions or improvements that could be made to grant related processes, procedures, and resources. CDE is eager for the rollout of a documents section to the PDC. CDE also suggested the addition of organizational or governance documents to this section

once it has been rolled out. Colorado also recommended that when sharing occurs between states and the outcome is the sharing of a tool or document, the story behind this exchange should be included in the PDC along with that particular tool or document. Lastly, CDE team members would also like to see a way for those without GRADS[360°] access to view the PDC, as the need to go through GRADS[360°] to get to the PDC might be a barrier or hindrance for some.