

SITE VISIT REPORT
WISCONSIN'S LONGITUDINAL DATA SYSTEM

FY15 SLDS GRANTEE

AUGUST 13, 2019

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 Wisconsin Department of Public Instruction (DPI) on August 13, 2019, to review progress on the state's fiscal year (FY) 2015 SLDS grant.

HISTORY

In addition to its current FY15 SLDS grant, DPI previously received FY06, FY09, and American Reinvestment and Recovery Act (ARRA) SLDS grants. Through these past grants, Wisconsin made progress in collecting data, implementing a data warehouse, and creating tools for stakeholders to access the data for analysis and reporting.

With its FY06 grant, DPI built its first student-centric data warehouse to link student and school data from a variety of sources over time for analysis and reporting. Matching programs and assigned LDS Student Keys were used to link the student data across the data sources. The Individual Student Enrollment System (ISES) data collection was expanded during the FY09 grant project to include coursework data and a student-teacher-course link.

DPI's FY09 SLDS grant focused on data use. DPI used the grant to expand the data available and to begin building data visualization tools for districts, DPI, and other stakeholders. The WISExplore project was started to support data use and data inquiry at the district and school levels.

In February 2011, DPI purchased a suite of data, dashboard, and reporting tools from VersiFit Technologies, now doing business as Hoonuit. The Wisconsin Information System for Education Dashboard solution, or WISEdash, was created.

With its ARRA grant, DPI began to focus on collaborations with other agencies, beginning with postsecondary partners. The educator licensing system was rebuilt, and discussions began around early childhood collaborations. These collaborations moved forward with the Race to the Top – Early Learning Challenge (RTT-ELC) grant, which concluded in December 2017 with a functional Wisconsin Early Childhood Integrated Data System (WI ECIDS). With the help of state funds, DPI has been able to sustain and continue to build upon the work that started with the SLDS grants.

WISE is at the heart of DPI's data work and includes many components. At its center is WISEdata, an open collection system that allows any student information system vendor to connect to the SLDS via an application programming interface (API). The API became functional in school year 2016-2017. WISEdash is a set of data analysis and reporting tools managed by DPI on behalf of the public and school districts. The WISEdash Public Portal contains a wide variety of aggregated and redacted data suitable for public viewing. The public portal lets users access data and compare and explore statistics

about the public-school system in Wisconsin. Users can compare one district or school's data to another and to the state's data.

WISEdash for Districts is a secure dashboard that includes similar data to the WISEdash Public Portal, but it allows authorized users to securely access and view data at the student level. WISEdash for Districts requires specific, locally managed permissions for district users to access data and the associated dashboards. Authorized district staff also may view statewide comparison data, much as they can in the WISEdash Public Portal. This feature was added after districts asked to minimize the amount of time they spend using multiple systems. With the statewide comparisons in WISEdash for Districts, users can use one tool for their day-to-day data needs. WISEdash for Districts can display updated data within 24 hours, making reports and dashboard as accurate as possible. The tool produces digestible data that even people with limited data skills can understand. The most frequently used dashboards contain data about assessments, attendance, and behavior/discipline. Stakeholders say that WISEdash has greatly helped them cross check student data.

WISEdash Local is a dashboard that allows districts to house additional district-level data that are not submitted to DPI. This capability gives users a greater breadth of data than those collected by the state. The same software is used for the WISEdash Public Portal, WISEdash for Districts (secure), and WISEdash Local. WISEdash Local is managed by a consortium of Cooperative Educational Service Agencies (CESAs) and school districts that establish governance structures and hire their own operational staff. Currently, 29 districts use WISEdash Local, accounting for 28 percent of the state's total student population. DPI believes participation is lower than desired for three primary reasons: WISEdash Local is not required, it carries a fee, and there are other, similar products on the market. Additionally, WISEdash Local is one product within the WISEdash suite, which offers Wisconsin districts the flexibility to use the products that work best for them. Many districts find that WISEdash for Districts and the WISEdash Public Portal meet their data needs and do not sign up for WISEdash Local. Wisconsin's future plans for WISEdash Local are to raise awareness of the tool, extend data use to the classroom, and increase district participation.

To help districts work with their data, DPI has contracts with the CESAs to build data use capacity through data inquiry retreats and data leadership academies. This training component is called WISExplore, and it includes individual- and district-level data literacy and data use coaching through WISEcoaches.

The final component of WISE is WISELearn, a repository of resources for educators related to data literacy and data use. DPI has integrated the resources in WISELearn with WISEdash so that users can search for and discover tools to help them with their data inquiry and continuous improvement planning efforts.

In Year 1, the SLDS team spent considerable time planning tasks, networking, instituting a governance structure, and hiring and training staff. The team experienced project delays in Year 1 due to a lengthy hiring process. By the close of Year 2, the project team was staffed with four full-time employees. Also in Year 2, contracts and cooperative agreements were executed with the Institute for Research on Poverty (IRP), the Wisconsin Evaluation Collaborative (WEC), and the Wisconsin Center for Education Research (WCER) to complete activities related to research and evaluation, as well as with the WISExplore team at CESA 12 to provide professional development and coaching to support data use. As the project continued to remain under budget, many grant funds were moved to the contractual category for Year 3.

The overall goal of Wisconsin's SLDS work is to create a sustainable, cost-effective, integrated system using automation and standardization to save time and resources and to ensure high-data quality for all reporting.

SLDS GRANT PERFORMANCE

DPI received an FY15 SLDS grant to accomplish six major objectives in two priority areas. The Instructional Support priority area includes the following objectives:

1. Extend the SLDS to the classroom
2. Increase assessment literacy
3. Increase capacity for data-informed planning

The Evaluation and Research priority area includes the following objectives:

4. Use the SLDS to identify and evaluate equity-promoting practices
5. Increase local evaluation capacity
6. Conduct cross-agency research on school context

DPI met the following goals related to the Instructional Support priority area during Year 4 of the grant:

- Added eight districts to WISEdash Local in project phase 2
- Added eight districts to WISEdash Local in project phase 3
- Ended Year 4 with 28 percent of the Wisconsin student population represented in WISEdash Local data
- Deployed a voluntary statewide intervention management system
- Acquired, implemented, tested, integrated, and deployed a pilot student intervention management system
- Created training materials and documentation for the pilot student intervention management system
- Trained pilot districts on the student intervention management system

- Continued updating existing balanced assessment resources
- Customized a Wisconsin-specific assessment inventory tool

Additionally, DPI and its research partners at WCER met the following goals related to the Evaluation and Research priority area during Year 4 of the grant:

- Reviewed existing survey instruments available at DPI and at WCER
- Wrote a report summarizing the requirements, scope, and desired outcome of the project
- Wrote and piloted the survey instrument
- Worked with WCER researchers to identify the survey sample population and on outreach to school districts about the upcoming teacher survey and its importance
- Conducted the teacher survey
- Presented qualitative research findings on contextually effective practices from eight elementary schools at the 2019 American Education Research Association Conference in papers focused on staff collaboration, relational trust, and understanding trauma-responsive pedagogy
- Selected, recruited, and conducted qualitative research at five Wisconsin high schools across the state, including 58 staff interviews and 51 observations
- Performed qualitative data analysis using Nvivo software
- Submitted four proposals for the 2020 American Education Research Association Conference
- Participated in brown bag seminars and made plans to conduct two more presentations at DPI
- Supported evaluation capacity focused on the continuous improvement process
- Continued to build resources and structures for continuous improvement through the Knowledge Mobilization initiative
- Supported IRP in completing and publishing the study *Socioeconomic Disadvantage and Educational Achievement: Evidence from Integrated Education and Social Service Administrative Data*

At the end of Year 4 of the SLDS grant and the start of DPI's no-cost extension period, the project has a remaining budget of \$778,168.33 out of \$5,242,866.

Wisconsin has applied for the SLDS Supplemental Grant to continue to complete goals in the already designated priority areas. This project is expected to be completed September 30, 2020.

STRENGTHS AND PROMISING PRACTICES

The following strengths and promising practices in data governance, data use, and sustainability have benefited Wisconsin and might also benefit other states.

Data Governance

DPI has a robust data governance program that includes each component of the Privacy Technical Assistance Center's (PTAC) *Checklist: Data Governance*. DPI also is actively working to improve data governance representation across the agency as well as its governance policies and procedures.

The governance hierarchy is composed of the Data Policy Committee, which includes leaders from each DPI division; the Data Management Committee; data stewards; and records retention personnel. Multiple processes and procedures support data requests, data access, data incident response, data use, and data destruction. The WISE project governance structure includes the WISE Steering Committee (also the Data Policy Committee), the WISE Leadership Team, an IT Project Request Process, and Project Prioritization.

In a continuous effort to improve governance around data sharing, DPI plans to work with WCER to create a master disclosure agreement. Having this agreement will streamline the data request process and ensure that each project has the same restrictions. Amendments can be added to the document upon request. DPI also plans to proactively review its current data redaction policy against new methods for redaction.

Data Use

DPI has developed and supports a number of tools and resources to help districts, schools, and classroom educators use data. Tools developed with SLDS grant funds are responsive to the stated needs of stakeholders at the district, school, and classroom levels. For example, the dashboards in WISEdash for Districts and the WISEdash Public Portal provide school- or district-level data for information and decisionmaking. Dashboards in WISEdash for Districts can help individual districts and schools access and use their data for school improvement efforts and other initiatives, and DPI provides support through WISExplore—as well as on-demand e-learning modules developed through the SLDS grant—to develop knowledge and skills in data use. The WISEdash Public Portal makes certain data available to the public so that stakeholders such as families, program administrators, and policymakers can access information when needed to answer key questions or to understand current outcomes for students in Wisconsin.

DPI's classroom data tool SmartTeach is a cloud-based web and mobile application that allows teachers to collect and track classroom-level student proficiency data. Educators can use the tool to take anecdotal notes on student activities, track student learning, and create and work with small groups of students while aligning instruction to state learning standards. For the initial iterations of SmartTeach, application developers visited classrooms around the state and observe teachers in their daily routines and understand how the tool would be used. Educators had multiple opportunities to use and provide input on the tool to ensure that they could use it on a daily basis. SmartTeach will continue to be developed by field research, built as an initial application prototype, and pilot tested in schools during

the upcoming school year. The tool will be revised based on feedback and beta tests, and preparations for its sustainability and implementation will be completed during 2019–2020.

Sustainability

DPI has taken many steps to ensure that its FY15 SLDS grant work is well integrated across its information technology (IT) and program staff. The governance structure—which includes multiple divisions across DPI—sets up this relationship, and the steering committee for the grant also includes a mix of IT and program representatives. The connection between IT and program personnel is continually supported by the Instructional Support and Evaluation and Research priority area objectives. For example, the SmartTeach tool was developed with significant teacher input that went directly to the IT developers who made the tool. DPI staff also were part of that process, listening carefully to what teachers wanted and adjusting their plans for the tool based on the feedback they received. Ensuring that all parties involved in the project are working together has resulted in successful use of the tool. These relationships were started at the beginning of the project, continued through Year 4, and are expected to continue throughout Year 5.

AREAS OF CONTINUED FOCUS AND ACTION ITEMS

DPI should continue to focus on the areas of data governance, data use, stakeholder buy-in, and sustainability to ensure successful completion of its FY15 SLDS grant and to sustain its data system work beyond the grant period.

Data Governance

Although DPI has a strong base of support for the SLDS and related work, it is recommended that DPI continue to strengthen the system's position and buy-in from stakeholders so that the SLDS endures beyond the current staff and administration. This recommendation includes ensuring awareness of the SLDS; encouraging involvement and support from multiple levels of Wisconsin's education system; expanding the SLDS beyond DPI; and garnering support from schools, districts, state administrators, and the legislature.

Data Use

DPI is encouraged to develop metrics to monitor the use of WISE tools to identify areas of further interest from stakeholders as well as use cases for the information produced by researchers. DPI has data on user satisfaction and the perceived usefulness of current tools, but it has very little data on the impact of the data use tools. There is not yet a plan to measure the use and impact of the information that comes from research, such as studies at both the University of Wisconsin and IRP examining factors contributing to the achievement gap. Such a plan should be considered as the research nears completion.

Stakeholder Buy-In

DPI should consider developing and regularly engaging a stakeholder group of SLDS users to provide feedback regularly on the development, use, and maintenance of the system. A formal feedback process beyond ad hoc requests for additional work would help ensure the long-term success of the SLDS.

Sustainability

DPI appears to have strong internal support to maintain the current WISE tools and is looking at ways to continue leveraging the work of the researchers. It is recommended that DPI develop a financial plan to ensure that research work can be used to improve policy and practice, as well as to continue research efforts after the SLDS grant ends.

DATA SECURITY AND DATA PRIVACY

The National Center for Education Statistics (NCES) administers the SLDS Grant Program and has engaged PTAC to aid in document review prior to SLDS grantee site visits.

PTAC, located within the Student Privacy Policy and Assistance Division, was established in 2010 as a one-stop resource for education stakeholders to learn about data privacy, confidentiality, and security practices related to student-level data systems and other uses of student data.

PTAC reviews data privacy and security documentation prior to regular SLDS monitoring visits. These reviews are a culmination of the Office of the Inspector General's audit of the SLDS Grant Program, which identified data privacy and security as areas of focus.

Approach

PTAC provides regular services to education entities, including official guidance on the Family Educational Rights and Privacy Act (FERPA) through the Student Privacy Help Desk, privacy and security training materials for states and districts, privacy and security best practice recommendations including issue briefs and checklists, and technical assistance site visits to state and local education agencies.

As a basis for this review, PTAC primarily used the *Checklist: Data Governance* and the *Data Security Checklist*, which were both developed to help stakeholder organizations establish and maintain successful data governance and security programs. Another resource used for this review was the *Written Agreement Checklist*.

Documents reviewed

- 4.300 Student Data Access Policy
- 4.315 Confidentiality of Individual Pupil Data and Data Redaction (policy)
- Acceptable Use Policy
- Confidentiality Training

- Data Access Request Limited Use
- Data Access Request through Footprints
- Data Governance at DPI (presentation)
- Data Governance Intranet Site Screen Shots
- Data Incident Template
- Data Quality Screenshots
- DPI CM Handbook
- DPI Data Contacts Inventory
- DPI Data Steward Committee
- DPI Data Use Agreement
- DPI Internal Data Access Request Process and Role Descriptions
- Data Use Agreement with University of Wisconsin Teach Ed Taskforce Studies
- Data Use Agreement for WEC ACP Eval
- IT Project Request
- Project Governance @ DPI
- Security and Privacy Review Guidelines – Documentation
- Snapshot Preparation – Detailed Guide
- Student Data Access Policy and Procedures Guidebook

Key takeaways

DPI has done a thorough job of identifying key areas within the organization that benefit from having a formal policy to address strategic aspects of data governance.

The PTAC review found that documentation provided by DPI addressed all areas critical to data governance, from organizational structure and governance roles and responsibilities to processes for accessing and requesting data. PTAC received a complete picture of the data lifecycle in Wisconsin as it relates to the SLDS and education data management in the state. Written agreements provided for review also met requirements and best practices.

Wisconsin has demonstrated one of the most robust and comprehensive data security and management programs that PTAC has reviewed as part of an SLDS site visit. By ingraining governance throughout the enterprise, Wisconsin sets high standards for student data privacy and security.

NEXT STEPS

- Continue monthly monitoring calls.
- Continue monthly technical assistance (TA) calls.
- Apply for no-cost extension.

TECHNICAL ASSISTANCE (TA)

The SLDS State Support Team (SST) is prepared to assist Wisconsin with any of the recommendations outlined in this report. The SST can provide TA through monthly calls, training webinars, facilitation of meetings, or implementation activities. In particular, the SST recommends that future TA focus on

- sustaining data governance beyond DPI's current administration;
- sustaining the research portions of the current FY15 grant beyond the life of the grant;
- developing mechanisms for measuring the impact of data use tools, training, and professional development; and
- developing a plan for ongoing stakeholder engagement.

Additionally, the SST recommends that Wisconsin continue to contribute to the SLDS community by

- sharing resources, reports, and activities through the SLDS Public Domain Clearinghouse;
- participating in and presenting at the annual SLDS Best Practices Conference; and
- presenting in SLDS webinars about research, particularly those that highlight practices for establishing relationships with external researchers, making research results actionable and usable by district and school staff, and describing the impact of research findings on policy.