

Issue BRIEF

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The Teacher-Student Data Link Project: Three Lasting Accomplishments



LASTING ACCOMPLISHMENTS

1. Building Implementation Support for States and Districts
2. Continuing Collaboration Among States
3. Creating New TSDL-Inspired Activities

In 2010, the Bill & Melinda Gates Foundation invited five states and three pilot districts in each state to participate in the Teacher-Student Data Link (TSDL) project. This project, which operated with guidance and support from the Data Quality Campaign and the Center for Educational Leadership and Technology (CELТ), sought to support states in developing (1) a best practices framework for defining “Teacher of Record”; and (2) business processes for collecting and validating data linking students and teachers at the state, district, school, and classroom levels.

The Foundation contracted with Mathematica Policy Research to conduct a descriptive implementation study of the TSDL project in five states (referred to as Phase I). Mathematica developed a report presenting findings from 2011, the project’s first year of implementation (see box for a summary of the states’ Phase I initiatives).¹ Building on that report, this brief articulates three lasting accomplishments of the TSDL project. It also presents additional information on the activities of the pilot states and districts, best practices for initiatives like TSDL that intend to bolster linked teacher-student data, and a support network for education agencies involved in similar work.

Information in this brief is drawn from telephone interviews conducted in early summer 2014 with CELТ staff members responsible for working directly with Phase I states and districts, and with state and district officials responsible for this phase of the TSDL project in their agencies.² A review of documents supplemented the research team’s understanding of the project initiatives and progress.



1 LASTING ACCOMPLISHMENT

BUILDING IMPLEMENTATION SUPPORT FOR STATES AND DISTRICTS

During Phase I, CELТ worked with Arkansas, Florida, Georgia, Louisiana, and Ohio to translate their data use, management, or system design goals into discrete project initiatives. CELТ’s

experiences with these states and their pilot districts enabled it to refine its implementation support plan and materials, and its approach to working with states during the second TSDL project phase. Phase II involves similar, intensive work with two additional states (Colorado and Kentucky) and targeted support such as on-site visits or a review of roster verification methodology for 15 states. Phase II started during the 2012–2013 school year.³

First-Year Implementation—State Initiatives, 2011

5 pilot states
AR • FL • GA • LA • OH

4 initiatives

1. Developing a Teacher of Record framework (FL, GA, OH)
2. Creating or refining roster verification procedures (AR, FL, GA, LA, OH)
3. Maintaining or upgrading the longitudinal data system (AR, FL, LA)
4. Establishing inter-agency data-sharing procedures (AR, LA)

Below are descriptions of changes that CELT applied to work with the Phase II states, based on lessons learned during Phase I.

ENGAGING EDUCATORS: ROSTER VERIFICATION

State- and district-level roster verification discussions, which occurred prior to system design and implementation, provided a concrete way to engage teachers early in the system development process. As one CELT staff member remarked, “Whatever happens, [teachers] want the roster to be accurate so that the process [of using TSDL data] is equitable. Data quality goes up when rosters are accurate. Until that’s in place, there’s skepticism about the whole [teacher-student linking] process.”

Develop more inclusive needs assessments.

To begin its work with each state in Phase I, CELT conducted a needs assessment and developed a detailed report articulating the state’s strengths and areas for improvement, and providing recommendations for developing strong teacher-student data links. States used these needs assessments and detailed reports to develop their written plans, or charters, which described each initiative’s goals and focus areas, desired outcomes, deliverables, project organization, project risks and assumptions, and detailed scope of work with targeted completion dates. CELT used these charters to benchmark states’ progress, review activities across states, and guide the development of the final reports in early 2014, which summarized the goals, accomplishments, challenges, and lessons learned for each initiative in each state.⁴ According to state respondents, they appreciated the personalized attention, noting that it helped them focus on their defined TSDL work, consider additional TSDL initiatives that were “not on their radar,” and better adapt their initiatives to their policy contexts.

Although the needs assessments and associated charters were beneficial for guiding CELT’s work with Phase I states and districts, CELT staff felt that the assessments did not capture all of the initiatives’ contextual factors. For example, CELT navigated each state’s political and legislative environment in order to support the TSDL work, but the needs assessments and charters did not include information about these unique environments. CELT staff reported that, although they provided states and districts with the needed support for TSDL initiatives, having advance knowledge of legislative and political challenges would have enabled them to “factor in reality” and better anticipate potential limitations and roadblocks.

Flexibly meet states’ changing needs.

States’ efforts evolved over time, requiring CELT to adapt to changing needs. For example, in the first year of implementation, CELT staff reported that states placed greater-than-anticipated emphasis on the importance of roster verification systems. Recognizing a growing need, CELT created a white paper that discussed when to use roster verification, different methods and models available, and how roster verification systems can improve teacher-student data links. CELT then shifted its narrative with states, moving from suggesting roster verification as a best practice to strongly recommending states have such a system in place before embarking on work that uses linked teacher-student data, such as analyses of teacher effectiveness based on student growth. As a result, Phase I and Phase II states prioritized roster verification work. CELT staff reported finding that “when states got business roles and processes in place for [roster verification], it enabled them to really have stakeholders understand the importance and complexity of teacher-student data links.”

Provide best practice resources online.

According to state respondents and CELT staff, CELT’s annual summits encouraged meaningful interaction and sharing of ideas after the summits. As a result, CELT recognized a need to create a repository for best practice materials and modified its website for that purpose. For example, the state of Georgia made its TSDL source code and business information available to other states through the website.

In addition, CELT realized that Teacher of Record definitions varied greatly from state to state to account for states’ legislative, political, and systems-based needs. As a result, CELT’s initial Teacher of Record framework served as a discussion starting point, but not a true framework. CELT therefore developed a TSDL purpose wheel to demonstrate the near- and

CELT Teacher-Student Data Link Purpose Wheel

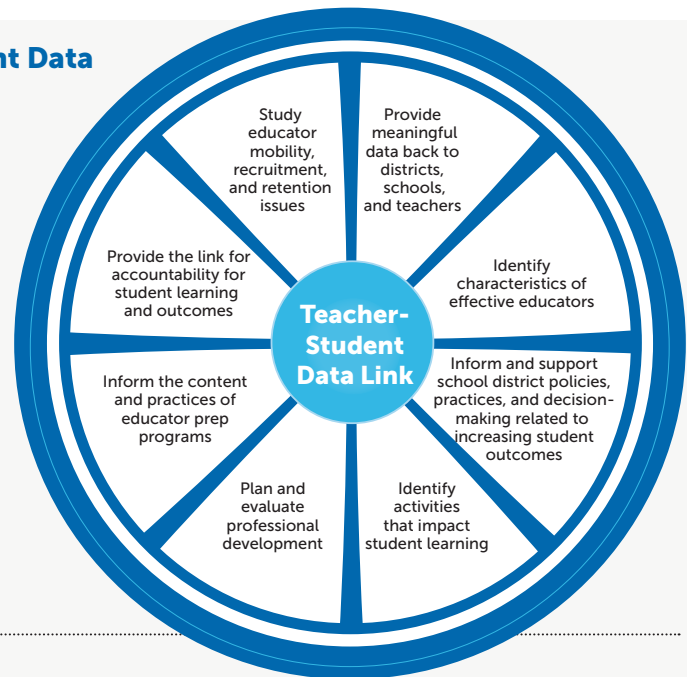


Figure 1

Source: Adapted from Center for Educational Leadership and Technology (CELT), 2014a.

COLLABORATION: DEVELOPING A JOINT RFP

When one state wanted to build an instructional improvement system, other CIOs in the Network shared their states' requests for proposals (RFPs) and selected vendor lists. The result was the first two-state, joint RFP for an instructional improvement system. The arrangement benefited both states financially because they received a better per-student price point from vendors.

long-term uses that teacher-student data links can have when a thoughtful Teacher of Record definition is in place (see Figure 1). CELT refined the wheel through discussions and collaborations with Phase I and Phase II states, and made the wheel and related information available on its website.

2 LASTING ACCOMPLISHMENT

CONTINUING COLLABORATION AMONG STATES

Attendees held CELT's cross-state summits in high regard. State and district respondents noted that the meetings encouraged sharing of best practices and lessons learned and, according to some, were instrumental in the success of their state's TSDL initiatives. In fact, numerous state and district respondents indicated a desire to continue the meetings beyond the end of the project.

Although CELT-facilitated cross-state summits ceased after Phase I, the meetings encouraged the development of a new network—the Chief Information Officer (CIO) Network. At the request of a Phase I state education agency CIO, CELT invited the CIOs of the five Phase I states and the CIOs from states that received 2010 Race to the

Top grants to convene and discuss the direction of state-based education technology systems and use. According to CELT staff, the meeting was successful because it filled a need for a forum for such discussions and laid the groundwork for continued cross-state collaboration. As of fall 2014, the CIO Network had become part of the Council of Chief State School Officers (CCSSO). It includes CIOs from state education agencies in all 50 states and meets four times per year—twice at the annual legislative and policy conferences and twice in state-based “field trips”—to discuss technology-related issues, best practices, and future work. For example, in February 2014, CIO Network members went to Kentucky at the invitation of the state's CIO to learn about how the state built its data-sharing system, the challenges encountered, and lessons learned.

3 LASTING ACCOMPLISHMENT

CREATING NEW TSDL-INSPIRED ACTIVITIES

State and district respondents reported exploring new work intended to bolster linked teacher-student data. The study team identified the following common initiatives, built from the initiatives implemented during Phase I.

NEW INITIATIVES: TRACKING STUDENT MOBILITY

One state is exploring ways to use the roster verification system to better capture student mobility between schools and districts. The current system captures movement for full-year courses, but the state hopes to expand the system to capture student mobility in courses that are less than a full year.

ENDNOTES on page 1

¹ See “The Teacher-Student Data Link Project: First Year Implementation” (Hallgren et al. 2013) for a discussion of factors that shaped the development and use of education data systems, detailed information about the initiatives that TSDL project states and districts undertook, and a summary of challenges encountered and lessons learned.

² Due to turnover of state and district staff, the study team was unable to conduct interviews with state or district representatives from Louisiana who were involved with the state’s TSDL project.

³ Although activities in Phase I informed Phase II as described in this section, our analysis did not include work conducted for Phase II.

on page 2

⁴ This work is described in the report on the first year of TSDL project implementation (Hallgren et al. 2013).

Enhance roster verification systems.

States continue to modify their roster verification systems to better account for unique teaching situations, such as blended learning or co-teaching, and enable them to obtain more frequent and accurate reports of classroom rosters. For example, one respondent noted that the state “got more realistic about what was really possible to capture [in the roster verification system], and in doing so simplified the roster verification process.” Another state developed an entirely new system to capture school enrollment data in real time instead of only twice a year. Using data from the new system, the state can more easily verify rosters prior to the “enrollment snapshots” that inform teacher evaluations.

Integrate and link data systems. Three states are enhancing their longitudinal data systems to integrate data from other systems, such as financial data systems, and to link to other sources, such as data from postsecondary institutions. For example, one state is integrating state standards and professional development resources, as well as linking its learning management system to the longitudinal data system. Integrating these systems and resources will enable teachers to track the standards that individual students have mastered and inform school leaders about areas in which teachers might need additional support based on their students’ achievement.

Respondents noted that such links will help states, districts, schools, and educators make better-informed policy, financial, and instructional decisions. For example, one state respondent hopes that such links will enable school boards to have more nuanced conversations about the effects of financial decisions on student achievement.

Implement new ways to present and use data. The availability of more robust linked teacher-student data encouraged states and districts to explore new ways of presenting and using data. In some instances, these changes resulted from needs identified by state staff. For example, one state worked on creating reports that are easy for stakeholders to understand. Initially, the state developed reports with “bubble charts” in which each dot along an axis represented the t-score of one student, teacher, or school on the given metric. However, the state learned that educators could not understand the information presented

in this form. The state is now developing data visualization tools and interactive presentations, and modifying report language to avoid overly technical terms, such as “metric.” Other states made changes to improve how data were used. For example, one state’s legislature expressed an interest in better identifying students at risk of dropping out of school. As a result, the education agency is creating an early warning system, using a model designed by another Phase I state.

LESSONS LEARNED

Phase I enabled CELT, states, and districts to understand the benefits and challenges of initiatives that intend to bolster linked teacher-student data. CELT can now use these experiences to better support Phase II states and districts. For example, for Phase II, CELT is encouraging states to clarify the purpose of TSDL and establish policies, definitions, and business rules before developing roster verification systems.

The TSDL project enabled state and district participants to think more deeply about the Teacher of Record definition and roster verification system, share lessons learned with other states and districts, develop more integrated systems, and conduct additional data analyses. Furthermore, although the CIO Network was not a goal of Phase I, it highlights the value participants placed on the relationships they developed through the TSDL work.

ADDITIONAL RESOURCES

Center for Educational Leadership and Technology (CELTE), Teacher-Student Data Link Project. “Roster Verification White Paper.” April 2013. Available at http://tsdl.org/resources/site1/general/White%20Papers/TSDL_RosterVerificationWhitePaper.pdf.

Center for Educational Leadership and Technology (CELTE), Teacher-Student Data Link Project. “TSDL Purpose Wheel.” 2014a. Available at <http://tsdl.org/UseandPurposeofTSDL.aspx>.

Center for Educational Leadership and Technology (CELTE), Teacher-Student Data Link Project. “State Final Reports.” 2014b. Available at <http://tsdl.org/FinalStateReports.aspx>.

Council of Chief State School Officers. “CIO Network.” Available at <http://www.ccsso.org/>.

Hallgren, Kristin, Cassandra Pickens Jewell, and Celina Kamler. “The Teacher-Student Data Link Project: First Year Implementation.” Report submitted to the Bill & Melinda Gates Foundation. Princeton, NJ: Mathematica Policy Research, February 2013.

