

Engaging Stakeholders for Successful System Design

Tips from the Texas Student Data
System Initiative

www.texasstudentdatasystem.org

**Texas
Student
Data
System**

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Stakeholder Engagement in System Design

As state education agencies and districts begin to focus on developing information management systems that can better equip educators to serve the unique needs of each student as opposed to simply meet compliance reporting mandates, stakeholder engagement becomes more critical than ever. Stakeholder engagement is an often-heard term, but what does it take to truly “engage” end users? In the context of this work, we use the term “stakeholder engagement” to mean an inclusive, open and sustained dialogue between educators and systems developers to define a truly useful set of tools to monitor and improve student performance.

If done well, engaging stakeholders is a continuous and time-intensive undertaking; however, we believe that this level of investment is required to define tools that meaningfully support effective teaching and learning. The development of a new statewide longitudinal data system for Texas, and in particular a new set of performance dashboards for teachers and administrators, offers other state and local education agencies pragmatic insights for both engaging and understanding the needs of educators as they embark on similar work.

KEY ELEMENTS OF THE TSDS

DCD: District

Connections Database
A new data warehouse to ease the burden of compliance data collection and reporting and populate user-friendly dashboards containing timely, actionable student data

SSIS: State-Sponsored Student Information System

An opt-in, voluntary SIS for districts, hosted by the state

PEIMS: Public Education Information

Management System
Repository for certified data for state and federal compliance reporting

TPEIR: Texas Public Education Information Resource

Statewide longitudinal data warehouse linking prekindergarten, college readiness, higher education and workforce data with K-12 data

Background

During 2009, the Texas Education Agency (TEA) launched a five-year effort to redesign and enhance its state longitudinal data system with three primary goals:

- Build a platform to deliver relevant and actionable data to educators to *continually improve performance* (e.g., an early warning system);
- *Alleviate the data collection and submission burden* on school districts and *improve data quality*; and
- Integrate key data into the TEA’s P-20 data warehouse to better *understand students’ preparedness* to contribute to the 21st-century workforce.

To address the first two of the three primary system goals, the TEA will develop the District Connections Database (DCD) as a key new component of the system, now known as the Texas Student Data System (TSDS). The DCD will provide the necessary infrastructure to allow

student-level data generated by district systems to be efficiently uploaded to the state, as often as districts choose, to enable the subsequent population and creation of reporting tools with timely, actionable student data (“dashboards”). The DCD will generate academic performance dashboards at the district, campus, classroom and student levels for use by educators in decision making that drives improved student outcomes.

In September 2009, the Michael & Susan Dell Foundation made a \$10 million commitment to the TEA to support the development of a prototype for the new DCD. Double Line Partners, a consulting firm focused on the public sector and K-12 education, is working with the Michael & Susan Dell Foundation and the TEA on this effort.

Although the DCD will ultimately become the conduit for districts to submit certified accountability data more easily, the DCD also will facilitate much more than just data submission and reporting for state and federal compliance. The intent is for the DCD to meet the ongoing information needs of a wide range of users who are focused on serving students and accelerating

their performance, including classroom teachers, campus leaders and district administrators. As such, the system’s success hinges on knowing exactly what educators require in terms of content and functionality: what data they need, when and how often they need the information, in what form they need it, and what they must be able to do with it once they have it.

The goals for the TSDS and the DCD were developed through detailed background research and extensive consultation with a wide array of education stakeholders. Recognizing that stakeholder input was not only fundamental to shaping the vision for the TSDS, but absolutely critical to successful system design, the TEA launched a comprehensive stakeholder engagement effort in early 2010 to provide information and collect critical feedback from future users of the TSDS across the state. As part of its role in the overall system design, Double Line Partners developed and is managing the stakeholder engagement process, facilitating stakeholder discussions, and capturing feedback and learnings.

Stakeholder Engagement Process

Since the launch of the TSDS initiative, a range of strategies has been used to inform and involve educators in the process. In defining TEA's objectives and actions for the stakeholder activities, it was important to clearly outline and address what they hoped stakeholders would get out of the process.

TEA Objectives

- Provide frequent updates on ongoing TSDS work
- Dispel “myths” surrounding the TSDS, TEA's intentions, and future data and system requirements
- Collect feedback on campus and district information needs
- Collect input on the design of draft reports and tools as they are developed
- Identify priority issues to be addressed in the next stages of development and refinement of the TSDS

Stakeholder Objectives

- Understand the key components and timeline for the TSDS as they evolve
- Fully understand the TEA's intentions for the system and feel confident that the TSDS will only improve the TEA's handling of district data
- Participate in a collaborative, iterative process
- Provide input and feel confident that their opinions matter, are heard and are welcome throughout the development process
- Feel excited about the prospect of having the enhanced TSDS available for their daily use in improving student outcomes

The TEA initiated the stakeholder engagement process with a letter from the commissioner providing background on the TSDS initiative and requesting deep local involvement in the ongoing design and development of the new system. In the letter, the commissioner invited teachers; campus, district and regional leaders; and data coordinators to participate in the TSDS initiative in at least one of three ways:

- Visiting a newly launched Web site for the TSDS (www.texasstudentdatasystem.org) to review

background and submit comments and questions online at any time;

- Joining the first of a planned series of webinars on the TSDS; and
- Attending a “Regional Stakeholder Forum” at one of eight regional Education Service Centers (ESCs) throughout the state.

In addition, a small group of educators were invited to serve on a volunteer advisory group, engaging on an ongoing basis in critical decisions regarding the TSDS.

The continuum of “light touch” to “high touch” approaches to reach stakeholders provides multiple channels and opportunities for stakeholder feedback. Doing so ensures that all stakeholders have an opportunity to participate as often as desired and in the manner most comfortable and convenient for them.

Strategies for Engagement



TIP 1:

Offer “light touch” and “high touch” feedback opportunities. Reach stakeholders often and in the manner most comfortable and convenient for them.

Holding Regional Stakeholder Forums

The “Regional Stakeholder Forums,” a series of in-person sessions at eight regional ESCs and Lubbock Independent School District (ISD) between February and April 2010, represented an important step in ensuring that stakeholders are informed about and given a chance to respond to the ongoing development of the TSDS. Because feedback from educators is especially important in the development of the DCD, a large part of these sessions focused on addressing user questions, requirements and concerns related to the DCD.

There are 20 regional ESCs in Texas, each providing professional development and administrative support to local education agencies within their regional service areas, making them invaluable strategic partners to the TEA in the development and rollout of the TSDS.

To ensure reaching a significant number and broad cross-section of stakeholders, both geographically and from small and large districts, eight ESCs across the state were invited to be host sites for the stakeholder forums. All eight ESCs accepted the opportunity, demonstrating their commitment to the TSDS effort. In addition, a ninth stakeholder forum was held in Lubbock ISD, where a pilot of the DCD prototype using live source systems and actual, anonymous student data is under way. In total, by partnering with the ESCs and Lubbock ISD, the TEA successfully elicited input from more than 2,000 educators.

The volume and quality of feedback coming out of the stakeholder forums underscored the importance of being in the field with actual users. Additionally, because of the unique perspectives of a teacher versus a superintendent and of a small or rural versus a large or urban district, reaching a diverse group of stakeholders proved especially valuable.

TIP 2:

Get out in the field and cast a wide net. Reach a broad cross-section of stakeholders with different roles and from varying contexts.

Making the Most of the Forums

Anticipating that the most and highest-quality stakeholder feedback would come from the in-person regional forums, the TEA needed to ensure the three hours with each group of educators was time well spent.

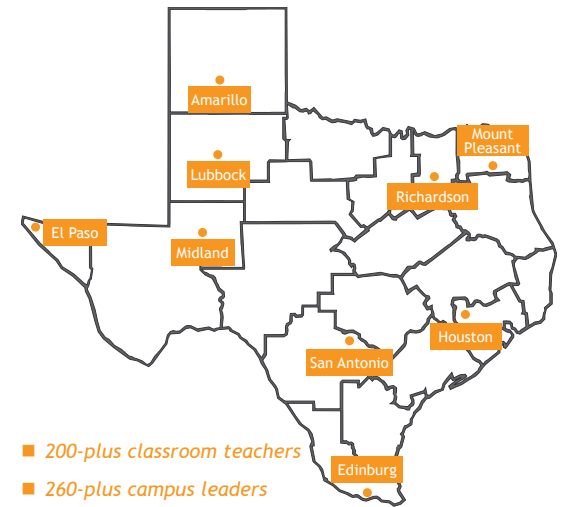
The TEA opened the regional forums with a plenary presentation to the full group that described the vision for the TSDS and additional background on the DCD. Within its presentation, the TEA addressed head-on growing questions and inaccurate rumors (dubbed “myths”) that the TSDS, among other things, would increase data collection requirements for districts, mandate use of planned state-sponsored systems by districts and enable the TEA to “extract” uncertified student data from districts at will. TEA used “mythbuster” messaging to ensure that these concerns did not divert attention from the true focus of the forums: getting constructive feedback from educators.

Following the TEA’s presentation, as supporters of the TSDS, the Michael & Susan Dell Foundation provided additional background on performance

TIP 3:

Address uncomfortable issues and points of resistance head-on to ensure that they don’t distract stakeholders from the mission at hand.

Regional Forum Sites



- 200-plus classroom teachers
- 260-plus campus leaders
- Nearly 700 district superintendents and administrators
- 600-plus information technology/data coordinators

management and video of a live teacher tool with timely, actionable student data. Providing a concrete example in the form of a video was instrumental to building both understanding of and enthusiasm for the DCD dashboards. Indeed, many teachers reported that they had not ever heard the term “dashboard,” but the video helped them understand its purpose.

After the plenary, the full group disbanded into breakout sessions of common user groups (teachers, campus leaders and district administrators) to allow ample time for dialogue among peers and ensure that everyone had an opportunity to be heard in a comfortable environment. The majority of the breakout session time focused on reviewing initial prototypes of the student and campus dashboards – the interactive, performance management tools of the DCD. The initial prototype dashboard contained four categories of student-level and campus-level performance measures (“metrics”): Student Engagement, Academic Progress, Academic

Challenge, and College and Career Readiness. Two additional categories were included at the campus level only: School Environment and Quality Workforce. These categories and the underlying metrics in each category were based on a nationwide survey and analysis of state, district and school scorecard best practices.

During the breakout sessions, participants received screenshots of the student and campus dashboards so they could submit notes and annotate the metrics in each category as “useful,” “not useful” or “needs clarification.” Written comments on any aspect of the dashboards were strongly encouraged.

because they believed the information would be too burdensome to collect.

The importance of providing stakeholders with concrete examples and a well-researched, well-documented prototype, albeit an early draft, cannot be overemphasized. Not only does it make tangible the vision for the system, but it also spurs additional thought by participants about what they may actually need or like to see. Moreover, it gives instant credibility to the effort.

TIP 4:

Ensure that stakeholders do not confuse feasibility with usefulness. If stakeholders believe data will be too difficult to come by, they are likely to discount the value of the information.

When gathering perceptions on the value of performance metrics in this manner, it is important to continually reinforce to users that they need to be concerned not about where the data come from, but about what information they would ultimately like to see. Users must be able to draw a clear distinction between how the data get there and whether or not they are useful. In some instances, stakeholders discounted the value of metrics

TIP 5:

Maximize time with stakeholders. Provide well-researched, well-documented examples and materials to which participants can concretely react.

NOT ACTUAL STUDENT DATA

ACADEMIC CHALLENGE

Comments:

The screen should be custom because not all schools offer AP courses. Customizing would allow schools to get the page with just the info school will use.

The college + Career readiness would be great! Not sure that all the info on the Academic Challenge portion would be extremely helpful. Most of this type of info can be seen through the students schedule + regular academic process. The info listed is good to know. But I wonder how many really would look at it. It would be good if you could also include a portion to show the students 6 year plan - if they are not going to college.

mean she is qualified/capable to AP/IB classes but is not a them?

no mean could be enrolled. Or does it just mean led?

qualified" students just have N/A column?

Following Up on Forums

All too often, stakeholders are surveyed and receive little or only anecdotal information in return. In the case of the TSDS, *not* quantifying and reporting the data in a transparent way would have undermined the key goal: to improve the delivery and use of timely, relevant and actionable data to inform decision making.

After the forums, all of the feedback was consolidated in a comprehensive report posted on the TSDS Web site. Data from the screenshot surveys of the campus- and student-level dashboards (e.g., ratings of “useful” on each individual metric) were collected and quantified. Ultimately, each metric on the student and campus dashboard prototypes received a score based on the percentage of users who found it useful, disaggregated by user group (teachers, campus leaders and district leaders).

Screenshots of the student and campus dashboards are available for download at www.texasstudentdatasystem.org/reference-docs.

Quantifying the stakeholder feedback (what metrics were most useful and for whom?) not only informs future development priorities but also sends a strong message to participants and other future users that every “vote” counts. Although the nationwide best practice analysis informed the initial set of metrics, the TEA committed, and subsequently demonstrated, to Texas educators that their input mattered in determining the final set of metrics to be included in the dashboards.

TIP 6:

Provide solid feedback on the feedback. Show stakeholders that each “vote” counts by quantifying findings and sharing them publicly wherever possible.

To date, the detailed feedback from educators on the TSDS, and the DCD in particular, has been largely tied to the responsibilities each user group faces in their roles, underscoring the need for depth and breadth among stakeholder groups. Teachers have been primarily focused on access to detailed contact, demographic and achievement data for their students, while campus and district leaders frequently highlight issues related to reporting, customization, data security and implementation realities, such as, “Who will enter all of these data and pay for it?” Ultimately, all of these needs must be prioritized and addressed to the degree possible to ensure buy-in for the new system. Moreover, some of the most valued feedback is negative. By identifying points of resistance and, in some cases, misconception, the TEA, or any sponsoring state or local education agency, can actively work to address them.

All of the feedback received from educators has important implications for the future of the TSDS in terms of content, functionality and implementation. Notwithstanding the depth of research and preparation conducted prior to engaging with end users, there will undoubtedly be new ideas and surprises, reinforcing the importance of this feedback loop.

Incorporating Feedback on System Content

Although the nationwide survey of best practice metrics and scorecards revealed several districts and schools using student attendance and discipline referral data as proxies for student engagement, stakeholders were consistently confused and unnecessarily distracted by the category titled “Student Engagement” in the DCD dashboards. Participants entered strong, candid comments, such as, “This is not how we measure student engagement in my district” and “Engagement has to do with evidence of learning, which is not the same thing you have here.”

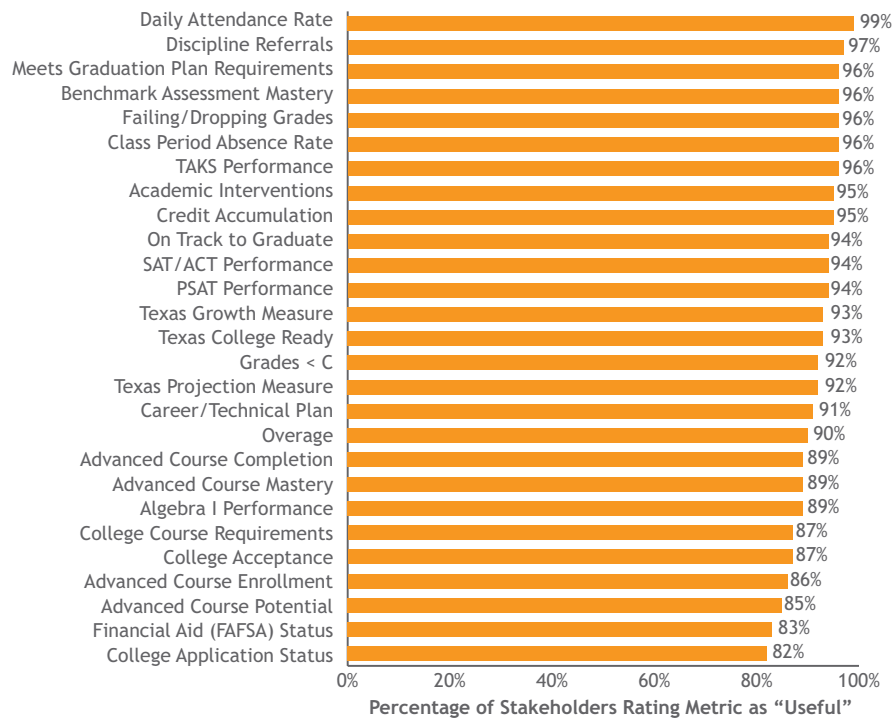
In the revised dashboard prototype, this category will be renamed “Attendance and Discipline.” The category name may not undermine the value of the associated metrics, which were universally considered useful, but this example demonstrates how something as seemingly minor as a name can turn off potential users before they even get started.

TIP 7:

Avoid jargon. Stakeholders overwhelmingly demanded “plain speak.”

The primary focus of the breakout sessions was to get feedback on the DCD dashboard performance metrics. However, the volume of feedback on the dashboard student information page alone revealed

Dashboard Performance Metrics by “Useful” Rating — All Stakeholders



A full summary of stakeholder forum findings is available for download at www.texasstudentdatasystems.org/reference-docs.

that some common information needs regarding a student’s family background, program enrollment and academic history were overlooked in the initial prototype.

All requests for student information must be vetted for compliance with the Family Educational Rights and Privacy Act (FERPA) and aligned with individual user roles and access rights. Nevertheless, several suggested changes, including relatively simple requests for more extensive adult contact information and background on Section 504 and medical needs, will save future users time and allow them to serve students better.

TIP 8:

Honor simple requests from stakeholders. What may appear inconsequential will save future users time and allow them to serve students better.

Regional forum participants rated the vast majority of the DCD dashboard metrics as useful, but the Academic Challenge metrics, in particular, received mixed reviews on usefulness, perhaps because many stakeholders feel greater pain points in meeting minimum standards rather than raising the bar. Although many metrics in the initial dashboards were designed to flag opportunities for intervention, the Academic Challenge page was introduced to identify instances where students can be pushed toward more rigor, or challenge.

An example metric is Advanced Course Potential, an innovative metric that flags students who have demonstrated potential for advanced coursework, based on standardized test and college admission test (Preliminary SAT) performance, but are not enrolled in advanced courses. Only 85 percent of respondents, predominantly teachers, considered this metric useful at the student level. By comparison, 99 percent of respondents considered

the daily attendance metric, which is critical though hardly innovative, useful. For the DCD, this may mean that the key to driving early user demand is meeting certain basic information needs *in one convenient place* before innovations are introduced. Because creating the dashboards is an iterative process, this feedback will help prioritize ongoing content development.

TIP 9:

Strike the right balance between meeting basic information needs and providing innovative reporting. Don’t be surprised if, in the beginning, the “stickiest” data aren’t the most innovative.

Revising System Functionality Requirements

Input from educators across the state, through regional forums and other channels, as well as usability feedback from educators participating in the Lubbock pilot, will drive functionality requirements for the DCD.

Common themes heard from end users regarding functionality have included:

- **Customization:** customizable goals/status flags, thresholds, filters; ability to click metrics on and off to show only what one wants to see and upload campus-specific, custom metrics
- **Data grouping and comparison:** sorting by accountability subgroups, special populations, feeder school, teacher, department; custom group creation; student and/or teacher lists that meet specific metric criteria; comparisons to peer campuses
- **Portability:** printing for other audiences (e.g., sharing attendance patterns with parents), exporting for analysis and correlation

Despite high demands for functionality, stakeholders echoed the need for simplicity and ease of use above all else. Examples they cited included user-friendly dropdown boxes, the ability to mouse over headings and metrics to get additional information or definitions, back buttons, and simple charts and graphs.

TIP 10:

Keep it simple. Educators have high demands for functionality, but also want to be able to customize, sort and port data as easily as possible.

Addressing Ongoing Interest and Skepticism

Districts and ESCs have overwhelmingly appreciated the significant time and effort invested by the TEA to reach out for feedback. For example, after attending the in-person sessions, more than 160 of the 2,000 stakeholder participants requested to join future forums. Moreover, a majority of stakeholders expressed strong curiosity about when the system would be implemented and when the DCD dashboards would be available, signaling that the objective of generating excitement for the new system had been met, at least for the near term.

Though most stakeholders appeared enthusiastic about the system, many also expressed concern about the effort and cost for districts to use the DCD. The TEA expects to alleviate many of these concerns through the ongoing pilot in Lubbock ISD and two additional planned pilots in other districts using different source systems. Piloting with multiple systems will provide proof of viability across discrete systems, increase ease of implementation and drive down future user costs.

Moreover, district leaders, in particular, voiced concerns regarding the TEA’s ability to effectively

execute the full TSDS plan on such a large scale (e.g., based on total cost versus current funding) as well as the likelihood of the TEA abiding by its commitments on future usage (e.g., allowing certain system components to be voluntary and all uncertified data to remain only for district use).

TIP 11:

Expect skepticism among stakeholders. Use straightforward, frequent communication throughout the development process to stem doubts about what is possible.

The TEA's experience is not likely to differ from that of *any* state education agency. As state and local education agencies work to improve the services they offer to districts and schools, they are likely to encounter skepticism. Candid communication, early and often, will help stem negativity and build both confidence in and excitement for the opportunities to be afforded by the new tools and resources.

Both campus and district leaders also had strong concerns about data security and privacy issues, questioning whether with so much readily available information, confidential student, school and

employee data might fall into the wrong hands or be used inappropriately. In particular, some questioned whether Freedom of Information Act (FOIA) requests could lead to inappropriate access to and potential misuse of all of the internal data that will become readily available.

The FOIA allows for disclosures of previously unreleased information from governmental entities upon request. Such requests today often come at the expense of staff time and resources, which the DCD can alleviate. Now aware of this specific concern, the TEA can address this and other related security and privacy concerns and develop practical, legally compliant solutions.

TIP 12:

Reassure stakeholders that data security remains a top priority. The availability of more timely, actionable data will not undermine the security and confidentiality requirements surrounding student, school and employee information.

Setting Priorities

The magnitude of and variation in feedback across many groups of educators brought to light a simple

truth: You can't be all things to all people, nor should you try to be. It isn't feasible to design a performance management system that fully meets the needs of every user across the 1,200 disparate districts in Texas or within any one state or district. Though all feedback is valued, it must be analyzed and prioritized to determine what can and should be addressed.

TIP 13:

Don't try to be all things to all people. Analyze and prioritize stakeholder feedback to determine what can and should be addressed by the system.

For example, several campus leaders and teachers requested more detail on benchmark assessments than what is currently proposed in the initial DCD dashboard prototype. Some requested the equivalent of item-level analysis of benchmark assessment results, currently provided through existing vendor offerings with large footprints in Texas. While gauging and responding to user demands, as the TSDS evolves, the TEA will seek to easily integrate with existing local source systems and not duplicate what many districts already have.

Conclusion

The stakeholder engagement process for the TSDS and the DCD is ongoing. Stakeholders will continue to have a strong voice throughout the development process to ensure a successful end result: a highly demanded, highly effective set of technology-enabled tools for educators to report, monitor, analyze, understand and react to critical information and improve student, campus and district results.

New prototypes will drive continued solicitation of feedback from Texas educators and continued refinement of user requirements and system design. In the near term, the TEA expects to re-engage with interested users to review next-generation DCD dashboards while continuing to ensure that questions and comments entered through the TSDS Web site are promptly addressed and incorporated into the work. Frequent updates will be posted on the TSDS Web site (www.texasstudentdatasystem.org) to ensure stakeholders are kept informed as new developments occur and milestones are reached.

The TEA is overseeing the TSDS solution with support from the Michael & Susan Dell Foundation and Double Line Partners.

Texas Education
Agency

The Texas Education Agency (www.tea.state.tx.us) is the state agency that oversees prekindergarten through high school education in Texas, which educates 4.7 million students in its more than 1,200 school districts and charter schools.

Michael & Susan
Dell Foundation

The Michael & Susan Dell Foundation (www.msdf.org) is dedicated to improving the lives of children living in urban poverty around the world. With offices in Austin, TX; New Delhi, India; and Cape Town, South Africa, the Dell family foundation funds programs that foster high-quality public education and childhood health and improve the economic stability of families living in poverty. The foundation has committed more than \$530 million to global children's issues and community initiatives to date.

Double Line
Partners

Double Line Partners, LLC, (www.doublelinepartners.com) is a consulting firm focused on serving the public sector, with a special emphasis on working in K-12 education. Double Line Partners works with a broad range of state and local education agencies across the United States to create scorecards and dashboards to improve student performance.

The TEA wishes to thank the regional ESCs, districts and educators throughout the state of Texas for their participation in the TSDS development effort.