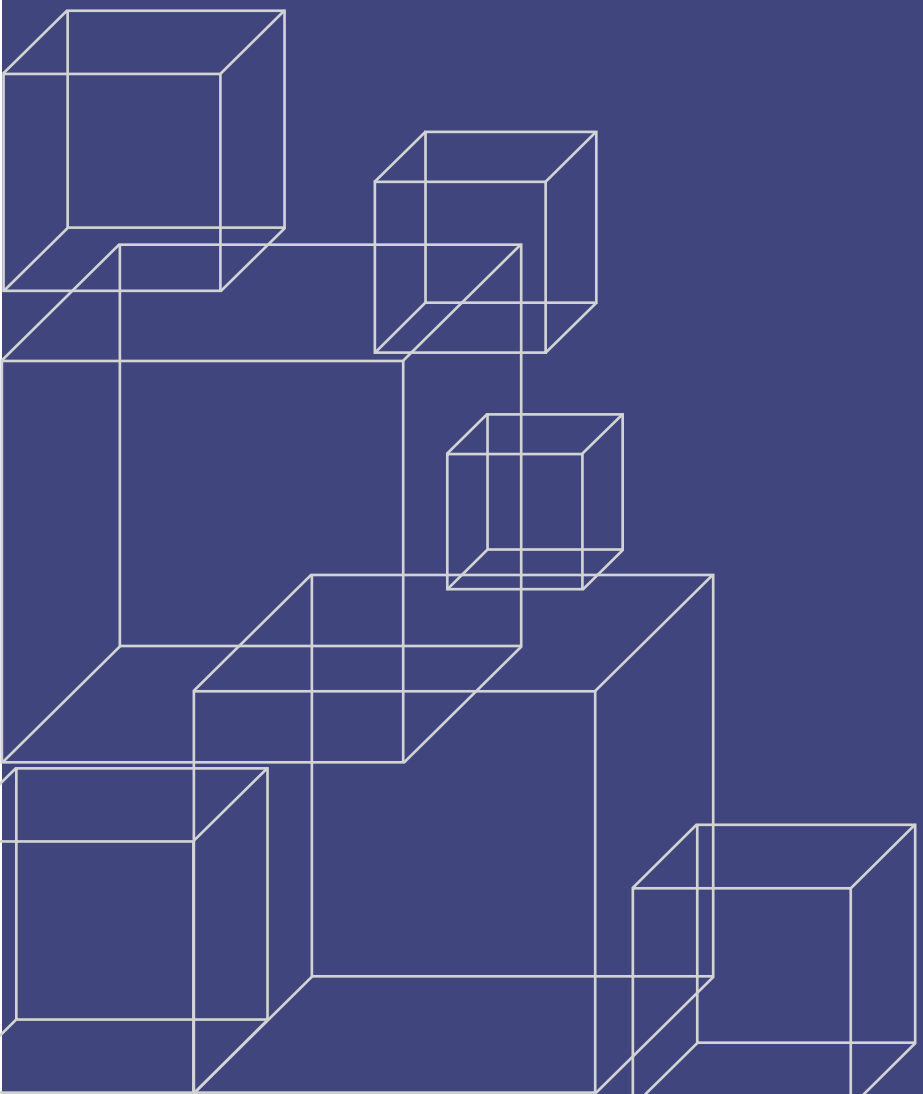
DATA QUALITY CAMPAIGN

Using Data To Improve Student Achievement

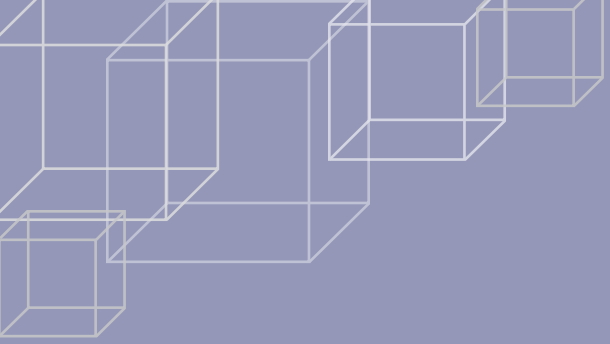
www.DataQualityCampaign.org

From Compliance to Service

Evolving the State Role To Support District Data Efforts To Improve Student Achievement



November 2011



Contents

Evolution of the State Role 3

Current State and District Efforts To Use Data: Significant but Uncoordinated Progress 4

No One Entity Can Succeed Alone: Why State and District Data Collaboration Is Critical 6

Four Guiding Principles for States 8

- *Principle 1: Collaboratively identify district data capacity to inform state data efforts* 9
- *Principle 2: Transform data into actionable information and ensure district access* 10
- *Principle 3: Ensure data literacy among educators through preservice and in-service policies and practices* 11
- *Principle 4: Maximize efficiency and minimize burden in data collection* 12

Conclusion and Next Steps 14

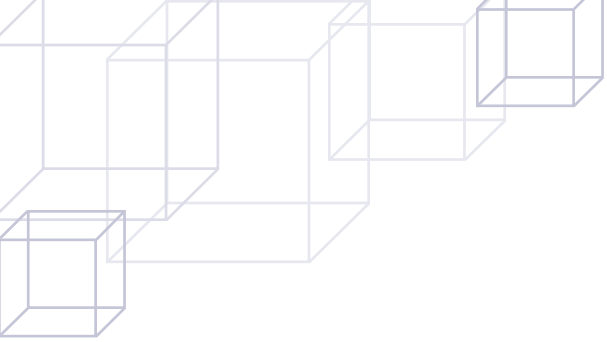
Appendix A: 10 State Actions To Ensure Effective Data Use 15

Appendix B: How Is Your State Supporting Local Data Use? 16

Appendix C: Promising State Practices 17

Endnotes 24

To download an executive summary of this paper, visit www.DataQualityCampaign.org/CompliancetoServiceSummary.



Evolution of the State Role

As state policymakers strive to ensure that every student is taught by an effective teacher and is ready for college and high-skill careers, they must also make drastic budget cuts. States cannot do more with less without collecting and using quality data to determine which programs and policies increase student achievement and the state's return on investment.

As a result of state, national and federal leadership and political will, states have dramatically increased their capacity to collect robust longitudinal education data. They have made significant progress developing statewide longitudinal data systems (SLDSs) that follow individual students over time, from early childhood through K–12 and postsecondary and into the workforce, to allow educators to tailor instruction, school administrators to make improved management decisions and policymakers to allocate resources to policies that have been proven to work.

However, without an equally ambitious effort to ensure access and build stakeholders' capacity to use data to increase student achievement, these infrastructure investments cannot be fully realized. Because districts are the agents that directly affect teaching and learning, states cannot succeed in this evolution in policy and practice unless they actively engage their districts. This engagement requires state education agencies to evolve from their traditional role of primarily ensuring compliance with state and federal laws to a new role as service providers that meet the diverse needs of all districts in the state. Instead of simply collecting required data from districts, states can engage in a two-way partnership to collaborate with districts of all capacity levels and support local efforts to effectively use data. Although state data systems will not replace district systems, they can enhance the data, tools and information currently available at the district level regardless of district capacity.

Since its inception, the Data Quality Campaign (DQC) has supported state policymakers' efforts to build and use SLDSs to improve student achievement. However, the DQC has always recognized that while states play a critical role in supporting the effective use of data, stakeholders at all levels must play a role to transform education into a data-driven enterprise. The DQC, along with the following national organizations that represent both state and district constituencies, presents this framework of guiding principles for states on how to support districts' data efforts to ensure that data are not only collected but also used to improve student achievement.

Supporting organizations include:

- American Association of School Administrators;
- Council of Chief State School Officers;
- Council of the Great City Schools;
- National Association of State Boards of Education; and
- National School Boards Association.

Current State and District Efforts To Use Data

Significant but Uncoordinated Progress

All states and many districts are actively engaged in efforts to effectively use data to improve student achievement. Leading states already were making progress toward building and using data systems to make informed decisions, but the passage of the No Child Left Behind (NCLB) Act and its requirements to increase reporting of disaggregated data by a variety of subgroups galvanized all states to pursue this policy priority.

This incredible state focus on longitudinal data systems was further fueled by federal grant dollars earmarked for this purpose, most notably through the Institute for Education Science's SLDS Grant program. However, due to the nature of state education agencies, the systems were developed to serve as compliance mechanisms for federal and state programs and accountability policies, not as sources of actionable information to be used by and for local educators and administrators.[1]

Although districts have long collected and reported data to the state to fulfill compliance requirements, they are also responsible for developing the technology infrastructure and policy environment that enable or inhibit data use in schools and classrooms.[2] As a result of their focus on data use, high-capacity districts with access to more resources (e.g., financial, human capacity and more) developed more sophisticated data systems than those of the state. However, almost 90 percent of districts nationally serve fewer than 10,000 students, and almost half of those districts serve fewer than 1,000 students. These districts likely lack capacity to use data. Therefore, states have much to learn from leading-edge districts to fulfill their responsibility for the success of all districts, regardless of capacity, and ensure that every district can use data effectively.

States are at a critical juncture — they must expand their data efforts to focus not only on compliance and accountability but also on continuous improvement, and they cannot do it alone.

While the intent of states and districts was not to build their data systems at cross-purposes, the systems were built simultaneously and without coordination. As a result, aspects of these systems reflect former priorities and needs and do not align with today's demand for flexibility and data use at all levels. District practitioners feel frustrated by these efforts and resources invested in the collection and reporting of data that they have been unable to use.[3] At the school level, principals and teachers complain that they are "drowning in data" and need effective ways to organize and inventory what they have collected, as well as guidance in using those data to drive school and classroom improvement.[4]

States are at a critical juncture — they must expand their data efforts to focus not only on compliance and accountability but also on continuous improvement, and they cannot do it alone. By working together, states and districts can change the culture in education so that data are not only collected but also used at all levels to improve student achievement and system performance.

Beyond the Bell Curve: How Some States Are Already Leading the Way in Serving Districts

Some leading states and their districts have already begun to change their relationship by taking actions to support districts' effective use of data, including:

- Analyzing data from schools and districts to evaluate policies and programs, understand patterns of performance, and prioritize state assistance and support; and
- Creating early warning systems and other diagnostic tools with cross-state comparability and context for local educators to target instruction and resources to the neediest students.[5]

Massachusetts: Enhancing District Efforts through Research and Tools

Massachusetts has worked aggressively to better align state-level work and efforts with the needs of all of its 393 school districts. The state is supporting districts' data use and understanding through multiple efforts, including the statewide early warning system. Using longitudinal data and viewing several cohorts of students, the state is able to calculate the probability that a student will graduate on time based on tipping points in student attributes in 8th grade. While districts such as Boston had already created an early warning system, Massachusetts is able to provide this capability to districts across the state as well as increase the tool's precision because of the volume of data at the state level. The state additionally is working with the Strategic Data Project at Harvard University's Center for Educational Policy Research to analyze data on college readiness and teacher effectiveness from schools and districts throughout Massachusetts to better understand patterns of performance. The state will use this information to prioritize assistance and support and develop additional research-based tools for local practitioners.[6]

For more information about Massachusetts' data efforts, visit www.DataQualityCampaign.org/resources/field_profiles/MA-districts. For additional examples of promising practices from other states, see Appendix C.

No One Entity Can Succeed Alone

Why State and District Data Collaboration Is Critical

School districts are nearly always the entities on the front line responsible for implementing key data-intensive state policy initiatives such as school turnaround, teacher evaluation and effectiveness, and next-generation assessment systems.

Many higher-capacity districts have created their own best-in-class data systems, benchmark assessments and data portals and are actively engaged with local educators in efforts to collaboratively analyze student progress and assess school and student performance. Yet for most districts, such efforts are beyond their resources and capacity. By working together and partnering around their efforts to use data, states and districts can:

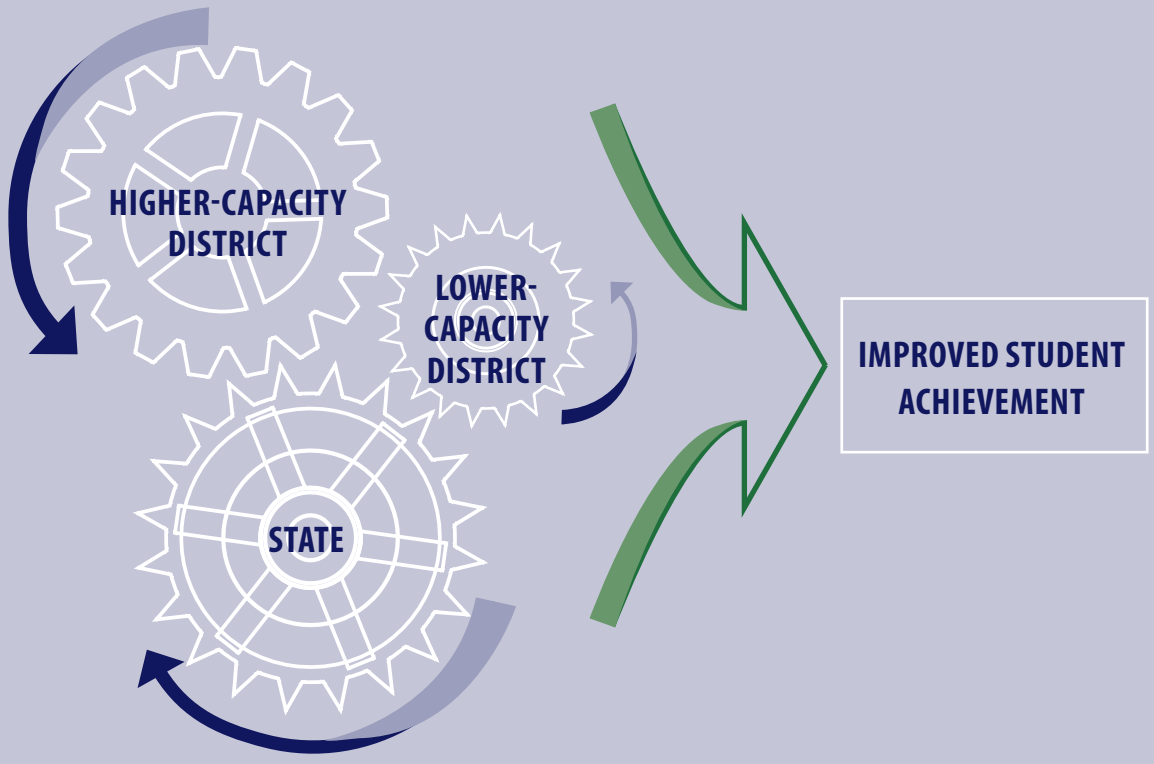
- ▷ Maximize data investments and reduce costs and burden;
- ▷ Ensure cross-district and cross-state comparability;
- ▷ Meet the needs of all stakeholders; and
- ▷ Equalize and enhance district capacity.

Meeting these goals will help states and districts realize the following benefits:

Goal	In the Past	In the Future
Maximize data investments and reduce costs and burden	• Systems worked at cross-purposes and/or duplicated each other.	• Funding is maximized for complementary efforts. • Unnecessary duplication of efforts is avoided. • State stores student-level longitudinal data to reduce district burden.
Ensure cross-district and cross-state comparability	• Systems were not interoperable. • Constant data reprogramming was needed to be able to submit and compare. • Data were not provided in context. • Data were not high quality, consistent or comparable to meet policy needs.	• Systems are interoperable. • Automatic data integration and comparability is facilitated by adoption of common education data standards. • Transfer or sharing of appropriate data is seamless. • Data quality is improved. • Data are provided within context of surrounding districts and schools.
Meet the needs of all stakeholders	• State system was designed to meet state needs and for compliance purposes. • Data flowed only one way.	• State approaches work as customer service entity. • Customer service is considered in system design and implementation. • Data flows up to the state, and actionable information flows back to districts.
Equalize and enhance district capacity	• High-capacity districts benefited from their own efforts. • Low-capacity districts struggled to collect and use data to inform decisionmaking. • Data were not timely, relevant or actionable for educators.	• Lessons learned and knowledge from high-capacity districts can be leveraged and scaled across the state. • State efforts serve as "equalizers" to ensure high capacity everywhere. • Timely, relevant and actionable data are available for all stakeholders.

State and District Gears Moving Together Produce More Powerful Results

No one entity, state or district, can effectively build and use data systems alone. When states and districts collaborate, each single entity and the entire system can gain more powerful results to improve student achievement and system performance.[7]



"The [state] longitudinal data system is an answered prayer for us as teachers because we spent so much time that could be utilized in other ways going and trying to get the information. If I want to look at any specific student, I can look at every single standardized test that child has taken at a glance and see over the last four, five years how that student has done. We're able to have time to take that information and build the lessons for meaningful learning, which is what our real purpose is."

— Pam Williams, Teacher, Appling County High School, 2011 Georgia Teacher of the Year[8]

Four Guiding Principles for States

The task for states is clear: shift from compliance bodies to service providers that support the use of data and start recognizing that districts are the number one customer. Districts are not only data suppliers but also data consumers.

Making this change to service provider will require an evolution of agency culture, a commitment to the projects by leadership and a shift in expectations. For states, the job of building data systems will not yield the desired outcomes until data use by policymakers; researchers; state, district and school administrators; teachers; parents; and community stakeholders is the norm. To help realize this vision, states must prioritize these four guiding principles:

1. Collaboratively identify district data capacity to inform state data efforts
2. Transform data into actionable information and ensure district access
3. Ensure data literacy among educators through preservice and in-service policies and practices
4. Maximize efficiency and minimize burden in data collection

Making this change to service provider will require an evolution of agency culture, a commitment to the projects by leadership and a shift in expectations.

Principle 1: Collaboratively identify district data capacity to inform state data efforts

Being customer driven requires being responsive to district needs and proactively engaging districts throughout all processes. States need to take differences in capacity and size into consideration (e.g., recognizing the resources available in some large, urban districts) when partnering with districts to develop state data policies and supports. By assessing and responding to districts' unique needs, states can serve as equalizers to ensure a minimum level of data capacity for all districts while not limiting additional data capacity and expertise in higher-capacity districts. State longitudinal data systems should be designed to provide a common set of data tools and information for every district, while enabling districts to voluntarily add data elements and functionality and customize the basic state system to meet their individual needs.[9]

Specifically:

- **Lower-capacity districts may need the greatest assistance** in building the foundational infrastructure for improved data reporting; for these districts, tools such as a state-provided voluntary student information system can help them more easily input data and report to the state.
- **Higher-capacity districts will want reporting mechanisms and tools** that allow educators and other users to access their students' data in real time and compare those data to aggregate data from other districts.
- **Still other districts will want to retain their own sophisticated data systems** but obtain analytic tools to benchmark performance against other districts.

To ensure customer focus, states should:

- **Proactively engage districts and other local entities** to identify data capacity and inform the design of the state data system and related policies; and
- **Develop and disseminate data tools and supports** in ways that encourage active use.

Texas: Redesigning a Data System for All Districts

Texas' Public Education Information Management System (PEIMS) was developed in 1986 as a state-level reporting system. Recognizing the need to improve not only its underlying architecture to collect and report data but also the timeliness, relevance and quality of information available to all stakeholders, over 18 months the Texas Education Agency (TEA) conducted detailed background research and extensive consultation with more than 2,000 education stakeholders across the state through various channels, including interviews and surveys with districts and charters, regional Education Service Centers that serve districts, and student information system (SIS) vendors. TEA will continue to hold regular forums with stakeholders throughout the course of the project. The Texas Student Data System website also can be used at any time to provide feedback.

The system includes a number of key components, including:

- **Education Data Warehouse (EDW).** The EDW allows student-level data generated by source systems (e.g., student and financial data) to be uploaded regularly from local independent school districts in a manner that is consistent with the Family Educational Rights and Privacy Act.
- **State-sponsored SIS.** The vast majority of districts do not have the budget or available staff to support sophisticated information technology departments. The state-sponsored SIS, which any district can use, will ensure that most districts in Texas can link to the EDW without expensive modifications to their current SIS.
- **Certified PEIMS data store.** This will serve as a repository for certified data used for state and federal compliance reporting, funding, program evaluation and educational research.
- **Texas P–20 Public Education Information Resource (TPEIR).** In addition to multiple years of P–12 data and higher education data from Texas colleges and universities and information on teacher certification and teacher preparation programs, the TPEIR warehouse will be expanded to link critical missing prekindergarten, college readiness and workforce (wage, industry and employment) data.[10]

For more information about Texas' data efforts, visit www.DataQualityCampaign.org/resources/field_profiles/TX-tsds. For additional examples of promising practices from other states, see Appendix C.

Principle 2: Transform data into actionable information and ensure district access

To transform data into information and knowledge that can inform decisionmaking, the data must be contextualized and tailored to meet the specific needs of various education stakeholders (e.g., teachers, parents, administrators, school board members). Analyzing district-reported data at the state level takes advantage of economies of scale and provides a more robust, statewide data set for analysis and comparison across districts. States must then ensure that district and other appropriate stakeholders have access to this actionable information through tailored data dashboards, reports and other displays.[11]

To ensure access to actionable information, states should:

- **Build robust partnerships with external research and development organizations** (universities, regional education laboratories and others) to develop research questions, conduct analysis and interpret findings from longitudinal data to inform data displays, reports and analytic tools;[12]
- **Develop data portals** that are engaging and enable users to access data based on role, and customize displays so users are able to answer questions and address real-world problems;[13] and
- **Align efforts with developers** that are creating data applications for local districts.

Colorado: Learning from a Leading District To Develop SchoolView

While states have critical responsibilities to ensure a culture that supports effective data use for continuous improvement in education, many districts are also investing in data systems and encouraging a data-informed culture. For example, in January 2009 Denver Public Schools (DPS) rolled out its Digital Door portals for administrators and teachers, offering academic staff a single point of access to current and historical information about their students.[14] Through Race to the Top conversations that showed the utility of DPS' administrator portal, Colorado Department of Education (CDE) policy and technology staff were able to integrate the lessons learned from DPS into the development of the state portal, SchoolView, released in August 2009. SchoolView brings education data to parents, teachers, students, administrators and other stakeholders and offers an engaging visual tool that shows student growth percentiles and allows comparison by district or school.[15]

In a state where half of the 178 districts have fewer than 600 students and insufficient resources to develop such systems on their own, SchoolView offers powerful data tools to districts with limited internal data capacity. CDE worked closely with districts in the design and development of SchoolView and one of its key components, the Colorado Growth Model. DPS in particular provided early input into the statistical methodologies behind this model. By creating a common metric for growth across the state, Colorado has aligned accountability structures into one overall rating system. Parents and educators no longer need to compare various school rating systems as they evaluate schools.

The Digital Door and SchoolView portals do not replace functionality from existing state and district data systems; they were designed to compile, aggregate and present data from multiple systems and to make that information accessible from a single place. This collaboration between DPS and the state of Colorado demonstrates one way states and their leading districts are working together to provide role-based access to information, supporting the effective use of data for continuous improvement.

For more information about Colorado's data efforts, visit www.DataQualityCampaign.org/resources/field_profiles/CO-schoolview. For additional examples of promising practices from other states, see Appendix C.

Principle 3: Ensure data literacy among educators through preservice and in-service policies and practices

Historically, the state was responsible for educators' preparation before they entered the classroom, setting certification, licensure and program approval processes, while districts were charged with educators' knowledge and growth during their tenure. However, these roles are evolving, and states and districts now share responsibility for educator training and development throughout educators' careers.[16] While the state continues its service role in ensuring educator data literacy through strong preservice policies, it also now is working collaboratively with districts to train educators to use data for improved student achievement and to reduce districts' reporting burden by sharing teacher performance data with education preparation programs.

To ensure educator capacity to use data, states should:

- **Collect the data on students and teachers** necessary to implement and evaluate state policies, and link these data according to identified promising practices, including developing robust "teacher of record" definitions;[17]
- **Change certification and program approval policies** to ensure that educators have proven competency in using data to inform instructional decisionmaking;
- **Share teacher performance data** annually and automatically with teacher preparation programs to support their efforts to improve their programs;[18] and
- **Provide or support high-quality professional development** to develop data literacy among educators on how to analyze, assimilate and apply data in their everyday work.[19]

Oregon: Building Educator Capacity To Use Data through Training

Through the Oregon Direct Access to Achievement (DATA) Project, the state has successfully developed a comprehensive training program to increase educator assessment literacy at all levels and assist school and district leaders in the creation of a culture of data use. The project provides two types of training — one aimed at instructional professional development and one focused on technical training for data stewards. Training sessions that take place across the state teach strategies for accessing, analyzing and using data to target instruction within schools and classrooms. The instructional strands to date include:

- Using Data To Improve Learning in Schools and Districts;
- Using Data To Improve Learning in the Classroom;
- Essential Skills in Reading: Impact on Teaching and Learning; and
- Essential Skills in Writing: Impact on Teaching and Learning.

In addition to direct training, the Oregon DATA Project supports regional centers in the development of data teams and professional learning communities and certifies trainers to teach the curriculum in their own districts and schools. The Oregon DATA Project works collaboratively with faculty from teacher preparation programs to incorporate their material into courses for both teachers and administrators.[20]

For more information about Oregon's data efforts, visit www.DataQualityCampaign.org/resources/field_profiles/ORdata. For additional examples of promising practices from other states, see Appendix C.

Principle 4: Maximize efficiency and minimize burden in data collection

It is widely reported that districts feel states add to their burden rather than provide value when it comes to data.[21] District data collection is time consuming and currently oriented toward ensuring compliance with federal regulations rather than for local use and decisionmaking. While states must meet federal requirements, they also have the power to simultaneously reduce burden and maximize their return on investment. For states, this collaboration allows for data to be collected and accessed in real time, ensuring greater timeliness and utility of data. For districts, such a partnership has the potential to streamline data reporting and reduce staff resources deployed and administrative burden.

To maximize efficiency and minimize burden, states should:

- **Ensure transparency and clearly communicate** data element definitions and collection timelines, providing sufficient time for districts to make changes;
- **Integrate the underlying technology** of state and district data and reporting systems so data can be more easily transferred electronically across each system; and
- **Focus data collection** on the information needed to answer critical policy questions developed through broad-based input in the state.[22]

Georgia: Integrating State and District Data Systems To Facilitate Use

After extensive conversations with district leaders, Georgia worked with its districts and local vendors to create a voluntary solution that links every district's SIS with Georgia's SLDS through a process called *tunneling*. By visiting the same local site that they have been using for years, educators and local administrators are now provided with instant access to critical information about the students in their districts, as well as students who just transferred from other school districts within the state. With the click of a mouse, teachers can instantly understand a student's prior education experience, and within the next few years, parents will also be provided access to important student-level data via their local district's parent portals.

Georgia was able to implement tunneling at minimal cost — roughly $2 million (funded through a federal SLDS Grant) to support the work of vendors, update the technical infrastructure that stores the data to create a stable platform and hire computer programmers to develop data visualizations. The project is currently being implemented in 162 of Georgia's 180 districts, and the others are expected to be integrated into the system soon. When the system is fully deployed, 20,000 administrators, 120,000 teachers, 1.7 million students and 6 million parents will have access to longitudinal data through the state-district system integration.[23]

For more information about Georgia's data efforts, visit www.DataQualityCampaign.org/resources/field_profiles/GA-access. For additional examples of promising practices from other states, see Appendix C.

Defining Clear and Complementary Roles
Potential Ways To Maximize State and District Data Capacity

As states begin to embrace the customer service mantra and follow the guiding principles in this paper, teasing out the complementary data capacity possessed by states and districts is important. While states must proactively engage local users throughout their data efforts to ensure that the SLDS is built and implemented to meet the needs of all stakeholders, districts must also actively engage the state to express their data capacity strengths and challenges. The following serves as a guide for states and districts as they embark on this conversation to define clear and complementary data roles:

The work	Examples of state data capacity	Examples of district data capacity
Collecting data	Collect and store longitudinal data that follow students over time from early childhood through K–12, postsecondary and workforce and across districts.	Collect and store student-level data (e.g., attendance, grades, and formative and interim assessment data) not required at the state level.
	Develop a data audit system to ensure data quality statewide.	Ensure data quality through accurate, timely data collection and auditing processes.
	Promote and adopt common education data standards and architecture to ensure interoperability.	
Creating reports/ dashboards	Create longitudinal data reports such as growth, early warning, predictive analysis and others that take advantage of statewide comparisons and put local comparisons in context.	Create and disseminate data reports using state and district data that enable resources, programs and interventions to be used for strategic management of schools and classrooms.
	Create reports that follow students who cross district or sector (early childhood, postsecondary and workforce) boundaries.	
	Develop and support statewide research agendas.	Cultivate a culture of research-based decisionmaking.
Building educator capacity	Develop professional development templates and tools to support districts in ensuring that current educators are proficient and competent users of data.	Deliver professional development for teachers and administrators around data use.
	Create statewide licensure, program approval and certification requirements to ensure that new educators are proficient and competent users of data.	Require data literacy and capacity-building training from teacher and principal certification programs.
		Provide coaching and other supports, including scheduled time, to enable data use at the school level.[24]

Conclusion and Next Steps

States, districts and all education stakeholders have much to gain from working together to realize the potential of state and local data investments, and the time to act is now. The political will to use data to improve student achievement and system performance has never been greater, as is the critical need for states and districts to work together to meet this demand. When states collaboratively identify district data capacity, provide actionable information to districts, ensure that educators are data literate, maximize efficiency and minimize data collection burden, they can evolve beyond being compliance bodies to being service-providing entities.

As a result of changing their relationship with districts, states can maximize data investments and reduce costs, ensure cross-district and cross-state comparability, meet the needs of all stakeholders, and equalize and enhance district capacity to ensure that districts, regardless of capacity, have the support required to effectively use data to improve student achievement.

Acknowledgments

This paper was written by Rebecca Shah with support from David Goldstein of the Data Quality Campaign. Additional research support was provided by Christopher Mazzeo, director of evidence use and policy, Education Northwest. The Data Quality Campaign thanks the American Association of School Administrators, Council of Chief State School Officers, Council of the Great City Schools, National Association of State Boards of Education and National School Boards Association for their support and guidance for this framework and the National Governors Association and state and district leaders in Delaware, Colorado, Michigan and Texas for the expertise that informed this paper.

Appendix A

10 State Actions To Ensure Effective Data Use

The DQC's 10 State Actions To Ensure Effective Data Use provide a roadmap for state policymakers to create a culture in which quality data are not only collected but also used to increase student achievement. To leverage current investments and ensure data use, states must act so that data can be linked across education systems, data are accessible to stakeholders and stakeholders have the capacity to use data to improve student achievement. By collaborating with districts, states can ensure that SLDSs are used to make informed decisions at all levels.[25]

Expand the ability of state longitudinal data systems to link across the P–20 education pipeline and across state agencies.

1. Link state K–12 data systems with early learning, postsecondary education, workforce, social services and other critical state agency data systems.
2. Create stable, sustained support for robust state longitudinal data systems.
3. Develop governance structures to guide data collection, sharing and use.
4. Build state data repositories (e.g., data warehouses) that integrate student, staff, financial and facility data.

Ensure that data can be accessed, analyzed and used, and communicate data to all stakeholders to promote continuous improvement.

5. Implement systems to provide all stakeholders timely access to the information they need while protecting student privacy.
6. Create progress reports with individual student data that provide information educators, parents and students can use to improve student performance.
7. Create reports that include longitudinal statistics on school systems and groups of students to guide school-, district- and state-level improvement efforts.

Build the capacity of all stakeholders to use longitudinal data for effective decisionmaking.

8. Develop a purposeful research agenda and collaborate with universities, researchers and intermediary groups to explore the data for useful information.
9. Implement policies and promote practices, including professional development and credentialing, to ensure that educators know how to access, analyze and use data appropriately.
10. Promote strategies to raise awareness of available data and ensure that all key stakeholders, including state policymakers, know how to access, analyze and use the information.

Appendix B

How Is Your State Supporting Local Data Use?

The roles and responsibilities below serve as guiding principles for states as they shift from compliance bodies to service providers supporting districts' efforts to ensure that data are not only collected but also used to improve student achievement. **Has your state taken these steps?**

STATE ROLE	STATE RESPONSIBILITIES
Principle 1: Collaboratively identify district data capacity to inform state data efforts	✔ Proactively engage districts and other local entities to identify data capacity and inform the design of the state data system and related policies. ✔ Develop and disseminate data tools and supports in ways that encourage active use.
Principle 2: Transform data into actionable information and ensure district access	✔ Build robust partnerships with external research and development organizations (universities, regional education laboratories and others) to develop research questions, conduct analysis and interpret findings from longitudinal data to inform data displays, reports and analytic tools. ✔ Develop data portals that are engaging and enable users to access data based on role, and customize displays so users are able to answer questions and address real-world problems. ✔ Align efforts with developers who are creating data applications for local districts.
Principle 3: Ensure data literacy among educators through preservice and in-service policies and practices	✔ Collect the data on students and teachers necessary to implement and evaluate state policies, and link these data according to identified promising practices, including developing robust "teacher of record" definitions. ✔ Change certification and program approval policies to ensure that educators have proven competency in using data to inform instructional decisionmaking. ✔ Share teacher performance data annually and automatically with teacher preparation programs to use in their efforts to improve their programs. ✔ Provide or support high-quality professional development to develop data literacy among educators on how to analyze, assimilate and apply data in their everyday work.
Principle 4: Maximize efficiency and minimize burden in data collection	✔ Ensure transparency and clearly communicate data element definitions and collection timelines, providing sufficient time for districts to make changes. ✔ Integrate the underlying technology of state and district data and reporting systems so data can be more easily transferred electronically across each system. ✔ Focus data collection on the information needed to answer critical policy questions developed through broad-based input in the state.

Appendix C
Promising State Practices

Below are additional examples of promising state practices that highlight the work of leading states as they change their relationship with districts to one of service provider. "Beyond the Bell Curve" states are leading the way with best practices in the areas identified, and "Guiding Principles" state examples provide real-life models for each guiding principle and corresponding state responsibilities.

Beyond the Bell Curve

▷ Analyze data from schools and districts to evaluate policies and programs, understand patterns of performance, and prioritize state assistance and support.

Colorado **Delaware** **Kentucky** **Massachusetts** **New York**	The Strategic Data Project (SDP) at Harvard University's Center for Educational Policy Research is working with five state agency and SDP fellows to analyze data on college readiness and teacher effectiveness from schools and districts throughout each state. This research will help these states better understand patterns of performance and use this information to prioritize state assistance and support and develop additional research-based tools that help local practitioners.
Louisiana	Louisiana created the Delivery Unit, which is charged with helping the Department of Education (LDOE) eliminate statewide achievement gaps and deliver on the agency's nine critical goals for improving student outcomes. The Superintendent's Delivery Unit (SDU) develops dynamic tools and processes to help LDOE plan, execute and adapt the LDOE support system toward its mission. A key aspect of the delivery unit process involves estimating the impact of key agency initiatives on student outcomes through various data analyses. Results of these analyses are used to strategically plan the use of resources in ways that more effectively support the needs of local school districts as they strive to improve educational outcomes. For more information, visit www.doe.state.la.us/divisions/sdu/.

▷ Create early warning systems and other diagnostic tools with cross-state comparability and context for local educators to target instruction and resources to the neediest students.

Tennessee	In December 2010, Tennessee developed the Early Warning System Focus Group. The group is made up of more than 60 people — including a mix of teachers, counselors and district leaders. The goal is to solicit participation and create district buy-in for a statewide early warning system and to find out what information would be most beneficial to teachers — what they need to know. Among the areas the focus group is investigating are what the key indicators should be for elementary versus high school students, how teachers/administrators will be trained in the use of the system and how the state will know whether the new system is making a difference in improving student achievement.
Virginia	The Virginia Early Warning System (VEWS) was developed in 2009 in collaboration with four Virginia school divisions and the National High School Center. VEWS relies on readily available data — housed at the district or school — to predict which students are at risk for dropping out of high school, target resources at the school and division level to support students who are not on track to graduate while they are still in school and before they drop out, and examine patterns and identify school climate issues that may contribute to disproportionate dropout rates. The system also provides a progress monitoring tool for high school students during the school year and documentation and tracking of student interventions. It can be used to generate summary reports at the student, school and division levels. The full system includes an implementation guide to support educators' use of the data. For more information, visit www.doe.virginia.gov/support/school_improvement/early_warning_system/index.shtml.

Guiding Principles for States

Principle 1: Collaboratively identify district data capacity to inform state data efforts

▷ Proactively engage districts and other local entities to identify data capacity and inform the design of the state data system and related policies.

Colorado	During the development of SchoolView, the state included district leaders on the technical advisory panel for the Colorado Growth Model so they could give feedback about what should be included in the information portal. Districts with strong data systems are also adopting the state growth model and using SchoolView. Elliott Asp, assistant superintendent for performance improvement at Cherry Creek School District, was surprised by how much his district learned by going through state unified improvement planning. " The process that the state put us through was thought provoking," he said, even for a district that had previously used data extensively in its planning processes. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/CO-schoolview.
Delaware	To create a system that is attractive to each end user, Delaware has engaged local stakeholders from the beginning in the design and development of the Education Insight System, which includes a data warehouse and dashboards for access. The state Department of Education held sessions with each district and a sampling of charter schools to inform the design of the request for proposals (RFPs) for Education Insight and has engaged a District Advisory Council in the RFP process and system development. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/DE-education-insight.
Louisiana	Louisiana is in the process of creating a statewide student performance dashboard with data updated daily via feeds out of district student information systems. As part of the design process, the state is engaging districts by providing deep-dive demonstrations of the proposed student performance management capabilities of the new system — getting districts on board by showing the value of the system and getting feedback from them.

At the District Level

As states engage with districts to inform the design of their state data systems and address related policies, the **Key Performance Indicators** project is an example that states may want to review. Initiated in 2004, the project created a tool through a collaboration among urban school systems across the country under the aegis of the Council of the Great City Schools. The tool is currently used by more than 65 districts and represents an approach to sharing and using data that is unique to public education. The tool includes detailed indicators of performance in critical noninstructional operations (budget and finance, human resources, information technology, transportation, food services, procurement, and other areas) that many states are beginning to examine to help meet their own needs. The automated system allows city school systems to compare their operations with those of other cities and to ask "what/if" questions that can lead to changes that allow them to improve efficiency and effectiveness.

▷ Develop and disseminate data tools and supports in ways that encourage active use.

Georgia	The state created a voluntary solution that links every district's student information system with Georgia's SLDS but allows educators and local administrators to visit the same state site they have been using for years. Now they are provided with instant access to critical information about the students in their districts, as well as students who just transferred from other school districts within the state. The project is currently being implemented in 162 of Georgia's 180 districts, and the others are expected to be integrated into the system soon. When the system is fully deployed, 20,000 administrators, 120,000 teachers, 1.7 million students and 6 million parents will have access to SLDS data through the state-district system integration. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/GA-access.

Principle 2: Transform data into actionable information and ensure district access

▷ Build robust partnerships with external research and development organizations (universities, regional education laboratories and others) to develop research questions, conduct analysis and interpret findings from longitudinal data to inform data displays, reports and analytic tools.

Arkansas	The Arkansas Research Center (ARC) at the University of Central Arkansas was created in 2009 "to foster effective educational data use and to serve as a clearing house for state agency educational data needed to benefit Arkansas schools." ARC was created through legislation and with federal SLDS funding to help the Arkansas Department of Education (ADE) answer its policy questions. ARC is working with the University of California, Los Angeles, to integrate a model of formative assessments into its system. The goal is to integrate the local data into the state system transparently so that the SLDS can function as the data repository for all local education agencies as well as ADE. The ARC then is responsible for mining those data, making sense of them and communicating the findings to stakeholders. For more information, read www.DataQualityCampaign.org/resources/1303.
Kansas	Kansas created the Kansas Educational Data Users Consortium (KEDUC), which includes the Kansas Department of Education, its board of regents, various stakeholders, and universities and colleges that supply the research capacity. KEDUC has been tasked with three foci: (a) professional development around data and research, (b) the development of a research agenda, and (c) communication around data and research findings. KEDUC vets research requests to ensure that the questions are relevant and aligned to pressing educational issues. For more information, read www.DataQualityCampaign.org/resources/1303.
Michigan	Michigan's Regional Research Initiative aligns with the federal goal of increasing researcher access to educational data by selecting a research partner for each of eight regional consortia within the state and developing research questions to assess the effectiveness of the education system. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/MI-rdi.
South Carolina	The South Carolina Department of Education (SCDE) reaches out to Clemson University and the University of South Carolina to conduct research projects. Research Services takes requests for data and research, reviews them, and sets priorities according to internal versus external requests. The group's role is primarily to provide the data needed for research that will be conducted by others. The department recognizes that developing internal research capacity is unlikely and has, therefore, developed a strategy to establish and maintain partnerships with other government agencies (e.g., South Carolina's Office of Research and Statistics) and institutions of higher education to address SCDE's questions. For more information, read www.DataQualityCampaign.org/resources/1303.
Tennessee	The Tennessee Higher Education Commission plans to contract with Vanderbilt University to lead a team of national and state measurement, research and evaluation experts. The Tennessee Consortium on Research, Evaluation, and Development is charged with creating a detailed, focused program of research in collaboration with various partners; collecting administrative and primary data to support evaluation of past and present policies and reforms in Tennessee; conducting scientifically rigorous and technically sound quantitative and qualitative analyses; preparing project reports, technical memoranda, working papers and other deliverables; and communicating project-related information and results using a multipronged dissemination strategy. Activities include both summative and formative evaluation efforts as well as both quick-response studies and large-scale, multiyear studies of the state's First to the Top reforms.

▷ Develop data portals that are engaging and enable users to access data based on role, and customize displays so users are able to answer questions and address real-world problems.

Arkansas	Arkansas developed multiple portals designed with specific users in mind. The state is developing portals for the public, researchers and journalists, district and school leaders, teachers, parents, and students. Each stakeholder is awarded a different level of access depending on his/her role. — Researchers can view and export Excel spreadsheets with de-identified data relating to district and school performance through the Arkansas Department of Education Data Center; — The public has access to the School Performance Reports detailing school-by-school academic performance; — Teachers can improve instruction through identifiable information received through a tailored portal; and — Students can access their information through Kudor and the Arkansas Scholarship Application website. The state has also developed Hive, which constructs powerful visualizations that provide a meaningful representation and context for student achievement data. For more information, read www.DataQualityCampaign.org/resources/989.
Delaware	The state's Education Insight Project includes the Insight Portal, which provides an integrated view of both local and state demographic and assessment data with a single sign-on through dashboards differentiated by stakeholder group. Instead of logging into several different information systems, educators and school leaders can view student- or classroom-level data all in one place. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/DE-education-insight.
Louisiana	Louisiana is in the process of building its state data system as a "supply chain," using data from districts and other sources. Phase one starts with the state enhancing district data with additional information and distributing the enhanced data to all districts through their local legacy data systems or though scorecards, reports or other means. In phase two, the state will create a statewide student performance dashboard with data updated daily via feeds out of district SISs. Teachers will be able to use these dashboards to see a student's profile, picture, attendance, discipline information, grades and test scores — everything collected at the district or state level.

▷ Align efforts with developers who are creating data applications for local districts.

Michigan	Through its Regional Data Initiative, Michigan made nearly 22 SISs interoperable. To do so, the state organized into eight regional consortia and offered competitive grants to help build the regional links to the SLDS. As part of the request for proposals, the state asked the regional consortia to identify a single preferred vendor system for its SIS. The state received eight applications using only five different SIS tools, thus facilitating interoperability.

Principle 3: Ensure data literacy among educators through preservice and in-service policies and practices

▷ Collect the data on students and teachers necessary to implement and evaluate state policies, and link these data according to identified promising practices, including developing robust "teacher of record" definitions.

Arkansas	The Teacher-Student Data Link Project is a cross-state, collaborative effort focused on developing a common, best-practice definition of "teacher of record" and business processes for collecting and validating linked teacher and student data. This important initiative brings five states and 15 pilot districts together to leverage their collective experiences, knowledge and resources to address one of the most critical components of their data systems, and it is a key step in using data to increase student learning and improve teacher quality. For more information, visit www.tsdl.org.
Florida	
Georgia	
Louisiana	
Ohio	

▷ Change certification and program approval policies to ensure that educators have proven competency in using data to inform instructional decisionmaking.

Louisiana	The state's approach to improving teacher preparation began with a vision of stronger requirements for certification and pathways for teacher certification. Three stages of change were identified, with benchmarks along the way: planning, implementation and impact on student learning. Louisiana's change process required redesign of teacher preparation programs, national accreditation, accountability indices for each institution and provision of a value-added assessment of teacher preparation. These strategies together are intended to create a system of continuous improvement in teacher preparation in Louisiana that is informed by performance metrics. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/LAvam.

▷ Share teacher performance data annually and automatically with teacher preparation programs to support their efforts to improve their programs.

Florida	As Florida begins to hold teachers accountable for the impact that they have on student learning, the role of teacher preparation programs is critical. For teachers in their first year of teaching in eligible grades and subjects (grades 4–10, reading/language arts and/or mathematics), student learning gains are measured by the Florida Comprehensive Assessment Test (FCAT). Data on FCAT learning gains from program completers are currently shared with teacher preparation institutions that can use the data to improve programs. Because FCAT is available only for tested grades/subjects, it may be too early to ascertain impact on the programs and teacher quality. Additionally, through Race to the Top activities, Florida will create an implementation committee to establish how to use the state's results from its new value-added calculations as one metric in a revised system for preparation program evaluation. The implementation committee will set performance targets for continued approval (and denial) of preparation programs.
South Carolina	South Carolina has begun efforts to link student achievement and teacher performance to educator preparation programs. In 2010, the South Carolina Department of Education (SCDE) and Clemson University created the Higher Education Assessment of Teachers pilot project, which provides value-added student achievement data to analyze the effectiveness of recent graduates from Clemson's Eugene T. Moore School of Education. Working with 15 school districts in South Carolina, the SCDE is performing value-added analysis on graduates and matching them with education departments, content areas, grade levels and specific courses taken to analyze the effect of all aspects of the educator preparation program. Working with research assistants at Clemson University, this project will serve as a model for all colleges of education throughout the state.

▷ Provide or support high-quality professional development to develop data literacy among educators on how to analyze, assimilate and apply data in their everyday work.

Massachusetts	To support data literacy, the state created a strong training curriculum that includes a user guide, handbook and teaching modules, available to districts both online and in person through an approved list of training vendors. To date, more than 10,000 educators have been trained on the curriculum as part of the state's initial goal of training two "power users" in every school district — sophisticated consumers of the data curriculum able to effectively use what they learned and support others' use. The training modules build on each other, with content ranging from how to use the data warehouse and read reports to how to interpret formative assessment, value-added and student growth data to, more generally, strategies for using data to inform decisionmaking. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/MA-districts.
Michigan	Within its Regional Data Initiatives project, the state is partnering with the State Board Continuing Education Unit. In this work, teachers who complete the Teacher Data Literacy Assessment will be awarded in-service, workshop, training or conference credits that can be applied toward teacher license and certificate renewal. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/MI-rdi.
Ohio	The Data Driven Decisions for Academic Achievement (D3A2) initiative was launched in 2006 to provide teachers and administrators with centralized access to student data, analysis and reporting tools, data tools, instructional resources, and professional development. D3A2 professional development materials are provided to help teachers learn how to transfer the information they glean from the data directly to their instructional planning, and the classroom assessment modules provide the tools required to construct and administer standards-based benchmark and classroom assessments.

Principle 4: Maximize efficiency and minimize burden in data collection

Massachusetts	The state has worked to reduce data reporting burden on districts and increase the efficient exchange of information by automating data transmissions between districts and the State Education Data Warehouse through the Schools Interoperability Framework (SIF). Almost half (175) of Massachusetts' 393 school districts have signed on to implement SIF, and in 2010–11, the project is being piloted in 65 school districts. The state is providing grants to cover 25 percent to 100 percent of the cost in many districts, with smaller districts paying less, and plans to cover all Race to the Top districts (258 of 393) by the end of the program in 2014. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/MA-districts.
Texas	The Texas Student Data System is designed to improve the capacity for data-driven decisionmaking among key education stakeholders within the state. The Public Education Information Management System data store will serve as a repository for certified data used for state and federal compliance reporting, funding, program evaluation, and educational research. The Texas Education Agency (TEA) will populate the data store through automated periodic extracts, or snapshots, of data from the Education Data Warehouse (EDW) for specific compliance, funding and accountability purposes, and school districts and TEA will validate these snapshots through a workflow and validation process. Another component is the state-sponsored SIS. The SIS, which any district could use, will ensure that most districts in Texas can link to the EDW without expensive modifications to their current SIS and will facilitate the interoperability of data structure and formats. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/TX-tsds.

- Ensure transparency and clearly communicate data element definitions and collection timelines, providing sufficient time for districts to make changes.

Maine	Prior to the implementation of the SLDS, the Maine Department of Education made nearly 250 data requests to districts each year, many of which were paper based and included the same variables, producing an unwelcome redundancy that frustrated districts and reduced their willingness to think of more data as a positive student support tool. Maine's data system is now set up to collect raw data directly from local systems, reducing the number of data submissions required and centralizing data collections at the state level. The state is also providing centrally hosted web-based systems to the districts to reduce administrative burdens and infrastructure costs.

- Integrate the underlying technology of state and district data and reporting systems so data can be more easily transferred electronically across each system.

Michigan	The Regional Data Initiatives project is working to create a comprehensive network of local data systems in the state by consolidating to five data warehouse providers for student demographic and assessment data. As part of this work, the state organized its 614 school districts into eight regional consortia. This federated model is enhancing local data systems already in place and expanding those systems to service new districts. This work builds off the current student information and data analysis systems and expands licensing to districts without strong data tools. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/MI-rdi.
Texas	One component of the Texas Student Data System is the Education Data Warehouse (EDW). The EDW allows student-level data generated by source systems (e.g., student and financial data) to be uploaded regularly from local independent school districts or from a state-sponsored SIS. Districts will be able to upload data as often as they choose, thus addressing the need for timely, actionable student-level data to inform decisionmaking at the classroom, campus and district levels. For more information, visit www.DataQualityCampaign.org/resources/field_profiles/TX-tsds.

▷ Focus data collection on the information needed to answer critical policy questions developed through broad-based input in the state.

New Mexico	Staff from the New Mexico Office of Education Accountability, in conjunction with staff from several other states, developed the notion of "killer questions" to describe the key policy questions that come up repeatedly across districts and states when they are provided with good data. To begin to identify and prioritize these killer questions, New Mexico developed a template that helped staff categorize the policy questions and then develop the corresponding data questions they would need to first ask and then answer to help solve a policy problem. The template enables the data system team to understand the uses of their product and the priorities of their key stakeholders (i.e., customers). For more information, read www.DataQualityCampaign.org/resources/869.
South Carolina	The project managers in South Carolina first conducted a landscape review of all the questions they could find from a variety of sources (e.g., National Center for Education Statistics, various South Carolina stakeholder groups, South Carolina legislation) and then prioritized the resulting list of almost 400 questions based on whether or not the data needed to answer them were available quickly and easily. They narrowed their list down to six basic questions and used those questions to drive further development of the system. They identified categories, topics and subtopics and tagged each question appropriately. They also matched each topic with all of the various types of users or "roles" that would be interested in the answers to those questions, and they identified what level of access those users would need (e.g., aggregate, student level, etc.). For more information, read www.DataQualityCampaign.org/resources/869.

Endnotes

1 B. Tucker, *Five Design Principles for Smarter Data Systems,* Education Sector, March, 8, 2010; R. Biddle, "Political Roadblocks to Quality Data: The Case of California," M. Kanstoroom and E. Osberg (eds.), *A Byte at the Apple: Rethinking Education Data for the Post-NCLB Era.* Washington DC: Thomas B. Fordham Institute, 2008.

2 B. Means, et al., *Implementing Data-Informed Decision Making in Schools — Teacher Access, Supports and Use.* Report prepared for U.S. Department of Education, Office of Planning, Evaluation and Policy Development. Menlo Park, CA: SRI International, 2009.

3 As part of the background research for this paper, interviews were conducted with district leaders and practitioners in four states — Delaware, Colorado, Michigan and Texas.

4 B. Means, et al., 2009; G. Ikemoto and J. Marsh, *Cutting through the "Data-Driven" Mantra: Different Conceptions of Data-Driven Decision Making,* Santa Monica, CA: Rand Corporation, 2007.

5 To learn more, see *Creating Reports Using Longitudinal Data: How States Can Present Information to Support Student Learning and School System Improvement,* Data Quality Campaign, November 2010, www.DataQualityCampaign.org/files/DQC%20Reports%20Issue%20Brief%20Nov8.pdf.

6 To learn more, see *Massachusetts Benefiting Districts through SIF, Training and Early Warning Systems,* Data Quality Campaign, 2011, www.DataQualityCampaign.org/resources/field_profiles/MA-districts.

7 To learn more, see *State-District Collaboration* Issue Area web page, Data Quality Campaign, www.DataQualityCampaign.org/build/issues/s-d-collaboration.

8 To learn more, see *Recognition Program,* 2010 State Data Leader of the Year, Data Quality Campaign, www.DataQualityCampaign.org/recognition_program/2010.

9 B. Tucker, "Texas Tackles the Data Problem," *Education Next,* Winter 2011 Volume 11, No. 1.

10 To learn more, see *Texas Student Data System — Serving Districts Across the State,* Data Quality Campaign, 2011, www.DataQualityCampaign.org/resources/field_profiles/TX-tsds.

11 To learn more, see *State Action 5: Role-Based, Timely Access to Information for Authorized Stakeholders,* Data Quality Campaign, www.DataQualityCampaign.org/files/DQC_State_Action_5_brief.pdf.

12 To learn more, see *Leveraging the Power of State Longitudinal Data Systems: Building Capacity To Turn Data into Useful Information,* Data Quality Campaign, May 2011, www.DataQualityCampaign.org/files/DQC-Research%20capacity%20May17.pdf.

13 To learn more, see *What Does Role-Based Access Look Like? Examples from States,* Data Quality Campaign, 2010, www.DataQualityCampaign.org/files/portals_examples.pdf.

14 To learn more, see *Transforming Educator Practice through Access to Information in Denver Public Schools,* Data Quality Campaign, 2011, www.DataQualityCampaign.org/resources/field_profiles/transforming-educator-practice-denver-public-schools.

15 To learn more, see *Supporting Districts with Data Access through Colorado's SchoolView,* Data Quality Campaign, 2011, www.DataQualityCampaign.org/resources/field_profiles/CO-schoolview.

16 To learn more, see *State Action 9: Educator Capacity to Use Data,* Data Quality Campaign, 2010, www.DataQualityCampaign.org/files/ACTION_9_-_Educator_Use_FINAL.pdf.

17 To learn more, see Teacher-Student Data Link Project, Center for Educational Leadership and Technology and Data Quality Campaign, www.tsdl.org; *Effectively Linking Teacher and Student Data: The Key to Improving Teacher Quality,* Data Quality Campaign, July 2010, www.DataQualityCampaign.org/files/DQC_TSDL_7-27.pdf.

18 To learn more, see *Leveraging State Longitudinal Data Systems To Inform Teacher Preparation and Continuous Improvement: A Data-Sharing Template To Prompt Discussion and Strategic Planning,* Data Quality Campaign, August 2010, www.DataQualityCampaign.org/files/DQC_Teacher_Template_8-16.pdf.

19 To learn more, see *Using Data To Improve Teacher Effectiveness: A Primer for State Policymakers,* Data Quality Campaign, July 2011, www.DataQualityCampaign.org/files/DQC-TE-primer-July6-low-res.pdf; *Using Data To Improve Teacher Effectiveness: A Checklist for States,* Data Quality Campaign, 2011, www.DataQualityCampaign.org/files/TE%20checklist.pdf.

20 To learn more, see *Oregon DATA Project — Building Educator's Capacity To Use Data,* Data Quality Campaign, 2010, www.DataQualityCampaign.org/resources/field_profiles/ORdata.

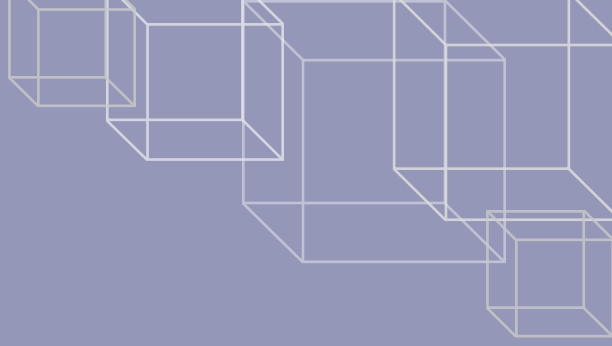
21 As part of the background research for this paper, interviews were conducted with district leaders and practitioners in four states — Delaware, Colorado, Michigan and Texas.

22 To learn more, see *Connecting Policy and Data: What Are Your State's Critical Policy Questions?* Data Quality Campaign, 2010, www.DataQualityCampaign.org/files/DQC_Critical_Questions_3-19-10.pdf.

23 To learn more, see *Transforming the Role of the State to Service Districts through Data Access,* Data Quality Campaign, 2011, www.DataQualityCampaign.org/resources/field_profiles/GA-access.

24 To learn more, see Data First, Center for Public Education, www.data-first.org.

25 To learn more, see *The Next Step: Using Longitudinal Data Systems To Improve Student Success,* Data Quality Campaign, 2009, www.DataQualityCampaign.org/files/NextStep.pdf.



DATA QUALITY CAMPAIGN

Using Data To Improve Student Achievement

www.DataQualityCampaign.org

The Data Quality Campaign (DQC) is a national, collaborative initiative to encourage and support state policymakers' efforts to improve the availability and use of high-quality education data to improve student achievement. The campaign will provide tools and resources that will help states implement and use longitudinal data systems, while providing a national forum for reducing duplication of effort and promoting greater coordination and consensus among the organizations focused on improving data quality, access and use.

Visit www.DataQualityCampaign.org for more about the:

- *10 Essential Elements and the 10 State Actions required to establish, maintain and use a quality longitudinal data system;*
- Data for Action 2010: DQC's State Analysis, *which shows where your state stands on the 10 Essential Elements and the 10 State Actions;*
- *Tools, materials, meetings and information that can aid states and interested organizations seeking to ensure increased quality, accessibility and use of data; and*
- *Information on how your organization can partner with the DQC to generate the understanding and will to build and use state longitudinal data systems.*

AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS

CCSSO

Council of Chief State School Officers

Council of the Great City Schools

NASBE

National Association of State Boards of Education

NSBA