DATA QUALITY CAMPAIGN
Using Data To Improve Student Achievement
www.DataQualityCampaign.org

Statement by
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Faced with the need to create a competitive workforce and dramatically improve the quality of America's education system, states have embraced an aggressive policy agenda to better prepare students for postsecondary education and careers. To inform this agenda, states also have made enormous progress over the past four years on developing robust student-level longitudinal data systems able to follow individual student progress through their educational careers.

Thanks to states' hard work and leadership, more states have the ability to use valid, reliable and consistent information to make decisions across the education sector. This important work has been affirmed by the inclusion of data as one of the four assurances of the State Fiscal Stabilization Fund in the American Recovery and Reinvestment Act (ARRA). The reauthorization of the Elementary & Secondary Education Act (ESEA) provides a strategic opportunity to promote the use of statewide longitudinal data systems to inform decisions by educators, parents and policymakers. ESEA reauthorization and ARRA provide states a strategic opportunity to engage a broad range of stakeholders in a thoughtful dialogue around how data systems should be built, expanded, and used to improve individual and system wide outcomes.

Data is Foundational to ESEA Goals

Until now, data collected by education agencies have been used to file annual state and federal reports, not to inform instruction and practice. Not only were there little data available on which to base decisions, but the culture within education did not support the use of data. *No Child Left Behind* mandated that data be reported for particular populations, which began to bring transparency to a system that had survived on the safety of aggregated data. NCLB provided the impetus to many states to build robust longitudinal data systems.

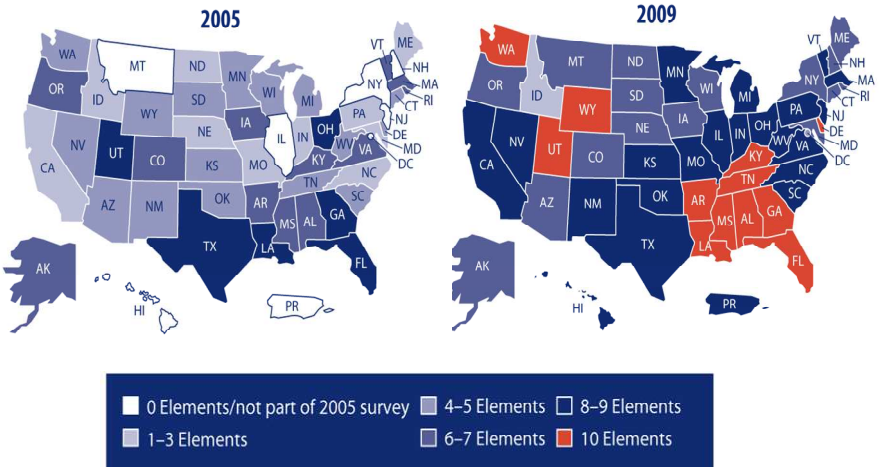
However, the NCLB data are normally snapshot statistics - information based on data gathered at a single moment in time. To maximize the power of data, not only for accountability purposes but to inform continuous improvement, we need to be able to follow individual students over time. Longitudinal data make it possible to track students' academic progress as they move from grade to grade; determine the value-added and efficiencies of specific schools, policies and programs; and identify consistently high-performing teachers and schools so educators and the public can learn from best practices.

Most importantly, longitudinal data can inform decision making for all education stakeholders because it can be analyzed and aggregated in myriad ways to answer specific policy and evaluative questions. With this data, teachers can tailor instruction to help each student improve, parents and students can make

informed decisions about their educational options, administrators can effectively and efficiently manage their education enterprises, and policymakers can evaluate which initiatives increase student achievement.

In previous reauthorizations, states did not have the rich longitudinal data systems now in place. This reauthorization can assume that every state will have in place within two years robust longitudinal data systems. States have made remarkable progress in building their capacity to collect longitudinal data as evidenced by the DQC 2009 Survey. Whereas no state reported having all 10 Essential Elements of a longitudinal data system in 2005 when the campaign was launched, this year, 12 states report having all 10 Elements (34 states have eight or more elements and only 2 states have fewer than 5 Elements) and every governor and chief state school officer has committed to building a P-20/Workforce longitudinal data system with all 10 Essential Elements by 2011.

State of the Nation

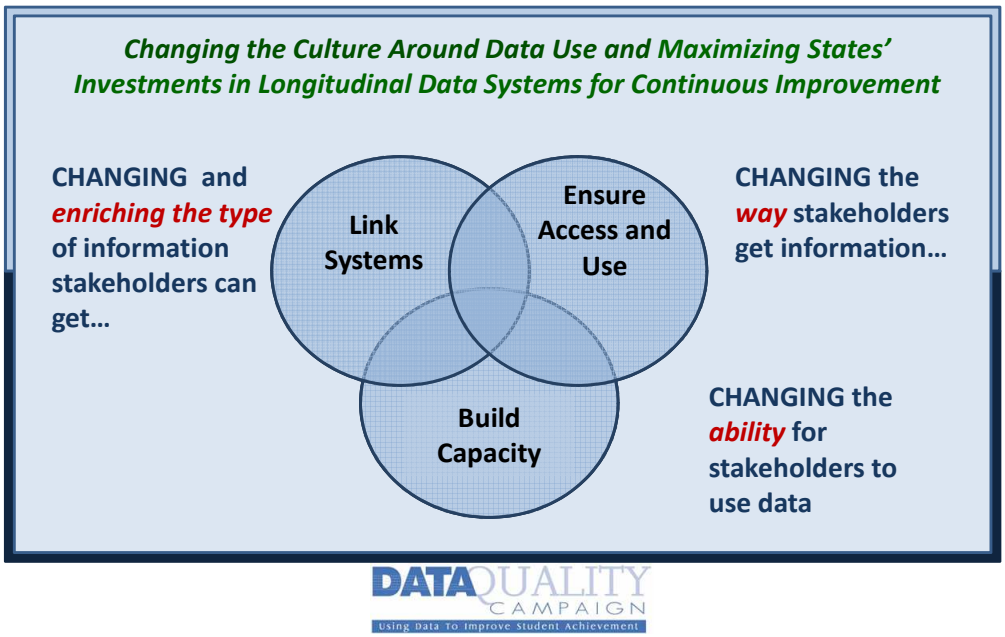


ESEA Reauthorization Provides Opportunity to Change the Culture around Data from Compliance & Accountability to Continuous Improvement

Data are useful only when they are transformed into actionable information that people are able to access, understand and use. Thanks to federal, state and local investments of political will and resources, the education sector is on the cusp of becoming an information-based enterprise. But reaching this goal depends on state staking actions that change the historically entrenched culture of using data for compliance reporting into one that values analysis of data and prioritizes constant communication to all stakeholders of the education system. Only when students, parents, teachers, administrators and policymakers have timely and ready access to academic and performance data will their decisions, practices and policies be driven by relevant information.

While states have built their capacity to collect richer longitudinal data, the vast majority of states must still develop policies and practices to ensure that all education stakeholder are able to access, understand, and use the information for continuous improvement. The DQC Partners have developed a set of 10 State Actions to Ensure Effective Data Use that center on three objectives: 1) Expand the ability of state data system to link across the P-20/Workforce Pipeline; 2) Ensure that data can be accessed, analyzed and used, and 3) Build the capacity of all stakeholder to use longitudinal data.

DQC 10 State Actions to Ensure Effective Data Use



The most recent DQC survey (2009) shows for the first time that states are just beginning to focus on these Actions to Ensure Effective Data Use:

- Majority of states (43) have implemented 3 or fewer of the DQC State Actions
- Only nine states are sharing individual progress reports with educators, and fewer than half of states provide reports to stakeholders using aggregate-level statistics.
- While 33 states now are able to link and share data between k-12 and postsecondary education systems, only 8 states are able to connect k-12 and workforce systems.
- No state is taking all the steps the DQC Partners deem vital to ensuring that educators know how to access, analyze and use data appropriately.

Creating policies and practices to promote the use of data is much more challenging than building the technical infrastructure of a longitudinal data system. It involves numerous agencies, sectors and policymakers—including k-12 and postsecondary education, early childhood, workforce, legislators, board members and governors—all working together to define a common state vision of human capital development and collaboratively addressing the turf, trust and technical issues, including security and privacy, inherent in these historically siloed fields. The reauthorization of ESEA provides an opportunity

to create the incentives to support this culture shift around data use for improving student achievement.

Recommendations for Reauthorization to Strengthen the Use of Data for Continuous Improvement

Reposition Data as a Flashlight Rather than a Hammer

NCLB completely unlocked the transparent power of data across the country. The disaggregation of student results provided the public a new and more detailed view of schools; it also spurred the creation of state data systems. In most places, this data was used merely as an accountability tool; in very few places was the data analysis *used* to improve school, student and system performance. Many, especially teachers, see this use of data as a tool to hammer them down. Reauthorization provides the opportunity to switch from focusing on data collection for compliance and accountability purposes solely and to focus on USING the data as a flashlight to inform decisions and improve instruction. This can be accomplished by building data into all titles of ESEA.

Revolutionize How States, Districts, Schools Approach Accountability

Given the increased capacity of state data systems, it is possible to communicate more meaningful, richer indicators of school and district progress and success than that was previously used to determine "Adequate Yearly Progress" and "Highly Qualified Teachers." States now have the capacity to calculate academic growth and to report accurate longitudinal graduation rates using the same comparable NGA rate. Information on course enrollment, grades earned, college ready test scores, when combined with postsecondary remediation and success data, can provide important information about the alignment of high school exit standards and postsecondary entrance requirements, as well as offer additional measures of college and career readiness of system graduates. Among the states who adopt the voluntary common core of standards and build a common assessment, there will be a new capacity to have true comparability across state borders; this not only opens new approaches of accountability measures, but also increases exponentially the ability to use data to identify efforts, programs, interventions, approaches that are worthy of further study or replication.

Similarly, as greater numbers of states build the student-teacher data link (greatly expedited due to the Race to the Top condition that all legal obstacles to this linkage be removed), there is an opportunity in reauthorization to identify successful /effective teachers partly based on their impact on student performance/achievement/progress. In addition to using a "value-add" measure for educator accountability, this data linkage also allows a richer analysis of the distribution of teachers by preparation, impact, and other factors such as experience, background, professional development. Again, this data analysis should be not confined to accountability purposes alone, but be used to restructure and improve the pre-service, professional development, and other educator development to meet the goal of improving student achievement.

Build the Expertise of State Agencies to Analyze and Communicate Data

States need people with high-level analytical skills and research training to mine the data and provide answers to the multitude of policy and evaluation questions. Agency research and analysis divisions have basically disappeared; reauthorization can focus on the need to increase the capacity within state agencies to manage thoughtful research agendas and to promote the need to partner with universities, advocacy groups, and independent researchers to conduct research that stakeholders need to inform practice and policy.

In addition to assuring researcher access to data, state agencies also need to build communication and school improvement strategies that provide actionable information (data within context) to all stakeholders in a timely, user-friendly manner. One of the hallmarks of NCLB was the requirement to post school and district report cards. Reauthorization should continue to reinforce the need to publicly report vital information, and that there be appropriate context and meaning provided for all stakeholders that is responsive to their specific needs. States need to start thinking about districts, schools, educators and families as customers and be proactive in tailoring the delivery of their pertinent data, rather than merely posting what is required in compliance mode.

State and district development of early warning indicator systems strategically combines the research and communication agency roles to provide teachers, administrators, parents timely, evidenced based interventions as soon as individual students and/or groups of students evidence signs of being at risk of failing/not staying on the college & career ready pathway. There is no better example of the culture shift of using data for continuous improvement and informing practice.

Finally, if states published rich, longitudinal statistics on their websites, it could change how the federal government collects data. The federal government could pull necessary accountability and compliance data directly off of public websites thereby reducing burden on states and reinforcing the power of posting this information in a transparent, public manner.

Increase Educator Expertise to Access and Use Data

Just as collecting the data alone is not enough to improve student performance, making the data available to educators is not sufficient to drive effective data use. Reauthorization needs to focus on helping states and districts set up policies and promoting practices that will lead to educators having a better understanding of how to use the data to improve student performance, including: requiring educators seeking certification or certification upgrades to receive training and show competence in the analysis, interpretation and use of data; promoting professional development and tutorials that are available in multiple formats in a variety of venues related to using data reports; promoting best practice research in data usage; providing training to educators on how to use and interpret specific reports; encouraging postsecondary institutions' preparation or leadership programs to offer training on the use of student-level data for teachers and principals; and encouraging districts to ensure educators have the technological tools necessary for accessing data, time for discussions with other teachers and autonomy to change the teaching process (instructional strategies, tools, use of time) based on the results of data analysis.

Reauthorization also provides a much needed opportunity to strengthen the management skills of our school and district leaders. We need to think about how to change how we train school and district administrators to understand how to manage with data for results and to rethink how we attract leaders

with management experience. Efforts that reinforce results-oriented management, such as the Malcolm Baldrige National Quality Award (National Institute of Standards and Technology) offer models and best practices from which to learn.

Reinforce the Need for State and District Data Systems to be Coordinated

The majority of the nation's 14,200 school districts are small and lack the capacity to develop and maintain a data system that does anything more than generate mandated reports. However, many large school districts have developed more sophisticated data systems than their state agencies due to greater budgets and staff capacity. Reauthorization can provide incentives for the development of state and district data systems that do not undermine or duplicate each other's efforts. Federal policy should encourage states to think about districts as their customers and build data systems and services for those districts that lack the capacity/resources to develop their own while also respecting larger districts' ability to develop and manage state of the art systems without causing inefficiencies and wasteful duplication of effort.

Promote Interoperability and Break Down Silos to Ensure Alignment across the P-20/W Pathways

Success of K-12 education can only be measured when we know if we have prepared graduates successfully for postsecondary challenges. We can only know these outcomes when our data systems can share information between K-12, postsecondary and workforce sectors. This does not entail creating one new all inclusive data system that connects all information; most states have determined it is enough to connect limited key data elements across sectors to answer the priority policy and practical questions in their state.

Consistent and common data standards are essential to creating interoperability, which makes data sharing among districts, between districts and states more efficient. The lack of common data definitions and technical specifications not only limits the ability of data analysis and use to inform critical questions but also makes linking data across multiple systems costly and inefficient and inhibits the development of new tools and services. Without commonly agreed-to voluntary standards, vendors are forced to tailor products to each system or state's specifications, increasing development time and costs. Interoperable systems built on common data definitions and standards facilitates the linking and sharing of information—across sectors, across districts, between district and state, and if the state desires, with other states.

The role of governors, legislatures and interagency governance bodies such as state P-20 Councils are critical to ensuring that these data systems work together to meet common state wide goals. This "state view" is necessary to align all the data efforts, to break down the traditional compliance approach, and to encourage data to be linked and flow across traditional boundaries. This effort to tap into the power of data cannot be seen as merely an IT project; to be successful, these efforts must be championed and led by policymakers and thought leaders and serve as the foundation for all policy and practice. The federal government can take advantage of the upcoming reauthorizations of the Elementary and Secondary Education Act, Workforce Investment Act, Individuals with Disabilities Education Act, Institute of Education Sciences Act, and the America COMPETES Act to ensure all the pieces of legislation are reinforcing interoperability of systems and limiting the creation of separate new data collections by using existing collections.

Clarify FERPA and Reinforce the Importance of Protecting Privacy and Security of the Data

States and districts must make it a priority to protect identifiable information through governance policies and practices that promote the security and privacy of the information while allowing appropriate data access and sharing. Reauthorization should reinforce the importance of protecting personally identifiable information, and overcome the continuing ambiguity and confusion around the Family Educational Rights and Privacy Act. States continue to ask for clear guidance on how they may access, share and use data as required by ARRA. ESEA reauthorization is an opportunity to harmonize federal policy around linking/sharing data with the new roles of state longitudinal data systems.

This agenda is realistic and timely; the next two years promise to feature unprecedented focus, energy and resources. This reauthorization of ESEA has the potential to build upon the ARRA opportunities and support the culture change around using data for continuous improvement. The renewed ESEA must help states address ongoing challenges related to improving cross-agency collaboration, ensuring timely access to this data and building the capacity of stakeholders to be able to use this information. States will know that their efforts to transform education into a data-informed, student-centric sector have been successful not when they get a series of 20 checkmarks on the DQC survey but when student achievement and system performance continue to improve as measured and validated by the data.

I'd be happy to answer any questions you have.
