

# ANNUAL PROGRESS REPORT *on* STATE DATA SYSTEMS



November 2009  
Update on the DQC 10 Essential Elements

Coming in  
January 2010:  
Survey results for the  
DQC 10 State Actions

# Using Longitudinal Data To Improve Individual and Education System Performance

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 track individual student progress over time and 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 recently 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). In fact, these stimulus requirements have already produced tangible results, including:

- ▶ **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.**
- ▶ **Policy issues previously considered "untouchable" are now being discussed. States are addressing obstacles, including legal barriers, to linking and/or using teacher and student information.**



# States Make Remarkable Progress ... But Still Have More Work To Do

Each year, the Data Quality Campaign (DQC) surveys all 50 states, the District of Columbia and Puerto Rico to assess states' progress toward implementing the 10 Essential Elements of a high-quality longitudinal data system. In 2005, no states reported having all 10 Elements. This year, **11 states** have all 10 Elements (up from six states in 2008). Other signs of progress include:

- ▶ **31 states** have eight or more Elements.
- ▶ Only **two states** have fewer than five Elements in place.
- ▶ **All but one state** collect student-level enrollment, demographic and program participation data (Element 2) and student-level graduation and dropout data (Element 8).

## More States Have the Ability To Answer Key Questions

- ▶ Which schools produce the strongest academic growth for their students? *(44 states collect data needed to answer this question, up from 21 in 2005)*
- ▶ Which achievement levels in middle school indicate that a student is on track to succeed in rigorous courses in high school? *(17 states, up from 3 in 2005)*
- ▶ Does the state have the necessary elements to calculate a longitudinal graduation rate, according to the calculation agreed to in the 2005 National Governors Association compact? *(47 states, up from 14 in 2005)*
- ▶ What high school performance indicators (e.g., enrollment in rigorous courses or performance on state tests) are the best predictors of students' success in college or the workplace? *(13 states, up from 2 in 2005)*
- ▶ What percentage of high school graduates requires remediation in college? *(30 states, up from 8 in 2005)*
- ▶ Which teacher preparation programs produce the graduates whose students have the strongest academic growth? *(21 states, up from 5 in 2005)*

- ▶ **All but two states** have a unique student identifier that connects student data across key databases and across years (Element 1) and have the ability to match students' test records from year to year to measure academic growth (Element 3).

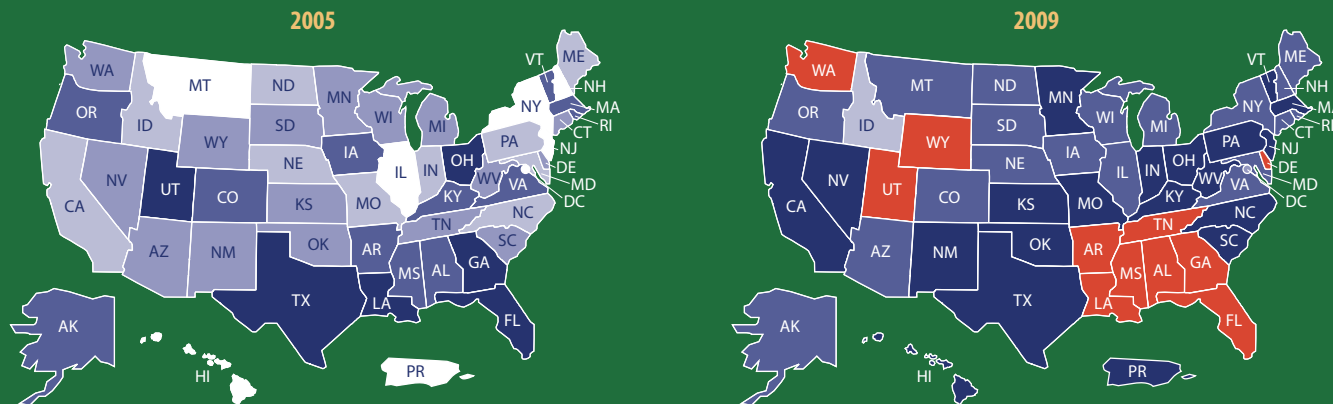
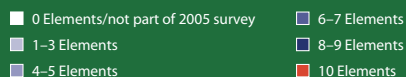
These improvements have been driven by significant and sustained commitments by states and the federal government. However, many states lack critical Elements essential for addressing college and career readiness and the impact that teachers have on student achievement (Elements 5, 6 and 7):

- ▶ Only **23 states** collect transcript information on courses taken and completed and grades earned (Element 6), and only **37 states** collect college readiness test scores (such as Advanced Placement, ACT and SAT) (Element 7). These data, when combined with postsecondary remediation and success data, can provide important information about the alignment of high school exit standards and postsecondary entrance requirements.
- ▶ Since 2008, just **three additional states** reported that they have a teacher identifier system with the ability to match teachers to students (Element 5).

ARRA has motivated states to remove barriers to data sharing, and it provides a strategic opportunity to engage a broad range of state stakeholders in a thoughtful dialogue around how data systems should be built, expanded and used to inform decisions to improve both individual and system outcomes.



## Progress Over Four Years



To see state-by-state results and find out more about what it takes to create a longitudinal data system, go to [www.DataQualityCampaign.org](http://www.DataQualityCampaign.org).

## 10 Essential Elements of a Longitudinal Data System

To build a robust longitudinal data system, states must include the following **10 Essential Elements**:

		Number of states* that reported having this element	
		2005	2009
1	A unique student identifier that connects student data across key databases and across years	36	50
2	Student-level enrollment, demographic and program participation information	38	51
3	The ability to match individual students' test records from year to year to measure academic growth	32	50
4	Information on untested students and the reasons they were not tested	25	46
5	A teacher identifier system with the ability to match teachers to students	13	24
6	Student-level transcript data, including information on courses completed and grades earned	7	23
7	Student-level college readiness test scores	7	37
8	Student-level graduation and dropout data	34	51
9	The ability to match student records between the P-12 and postsecondary systems	12	31
10	A state data audit system assessing quality, validity and reliability	19	49

\*This includes the District of Columbia and Puerto Rico.

# Looking Ahead: States Must Take Actions To Promote the Use of Data

Creating state longitudinal data systems and collecting vital information to answer key questions about performance is an important first step. However, states also must have policies and practices in place so that stakeholders throughout the education system can access, understand and be able to use the information effectively.

When states have longitudinal data that are shared and tailored to users' needs, stakeholders can act on the information to:

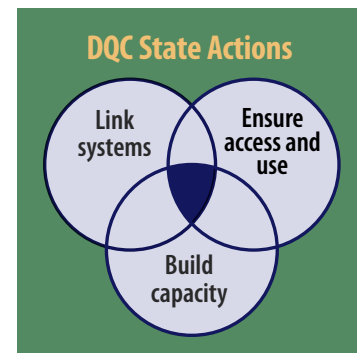
- ▶ Continuously improve program and practice;
- ▶ Better define student success with transparent, well understood and broadly accepted performance indicators;
- ▶ Accurately forecast a students' readiness for key transitions from preschool through high school and into college and careers and provide necessary supports and interventions;
- ▶ Answer day-to-day questions and evaluate issues such as strengths and weaknesses identified by formative assessments; intervention effectiveness; and the relationships among attendance, mobility and standardized test scores; and

- ▶ More effectively allocate resources (e.g., time, money and staff) based on returns on investment.

The 2008 DQC survey reveals that **28 states** have the ability to link their postsecondary data with K–12 systems, **44 states** have the capacity to identify students in public prekindergarten programs and link this information with K–12 education data, and **8 states** share information with workforce.

However, far fewer states are actively sharing this information and using it to drive decisionmaking. **In January 2010, the DQC will release its first report on the 10 State Actions to ensure the effective use**

**of longitudinal data**, which will provide greater detail on how states are changing policies and practices to promote linkages across systems, ensure appropriate access to new data and analysis, and strengthen stakeholder capacity to use the information.



## 10 State Actions To Ensure Effective Data Use



**Expand the ability of state data systems to link across the P–20/workforce pipeline.**

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 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 by multiple stakeholders including educators, parents and researchers.**

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.**

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.

# DATA QUALITY CAMPAIGN

Using Data To Improve Student Achievement

The Data Quality Campaign (DQC) is a national, collaborative effort to encourage and support state policymakers 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.

## Managing Partners

- ▶ Achieve, Inc.
- ▶ Alliance for Excellent Education
- ▶ Council of Chief State School Officers
- ▶ Education Commission of the States
- ▶ The Education Trust
- ▶ National Association of State Boards of Education
- ▶ National Association of System Heads
- ▶ National Center for Educational Achievement
- ▶ National Center for Higher Education Management Systems
- ▶ National Conference of State Legislatures
- ▶ National Governors Association Center for Best Practices
- ▶ Schools Interoperability Framework Association
- ▶ State Educational Technology Directors Association
- ▶ State Higher Education Executive Officers

**For a list of endorsing partners, please visit [www.DataQualityCampaign.org](http://www.DataQualityCampaign.org).**

## Visit the Data Quality Campaign Web site ([www.DataQualityCampaign.org](http://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;
- ▶ Results of the DQC's 2009 update of its annual survey that show where your state stands on the 10 Essential Elements;
- ▶ 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.

Visit [www.SchoolDataDirect.org](http://www.SchoolDataDirect.org) for information about public schools nationwide.