

States Could Empower Stakeholders To Make Education Decisions with Data ... *but They Haven't Yet*



How can states allocate scarce resources AND improve student achievement without data? The answer is simple: They can't. States cannot inform these critical policy conversations, or any others for that matter, without effective data use.

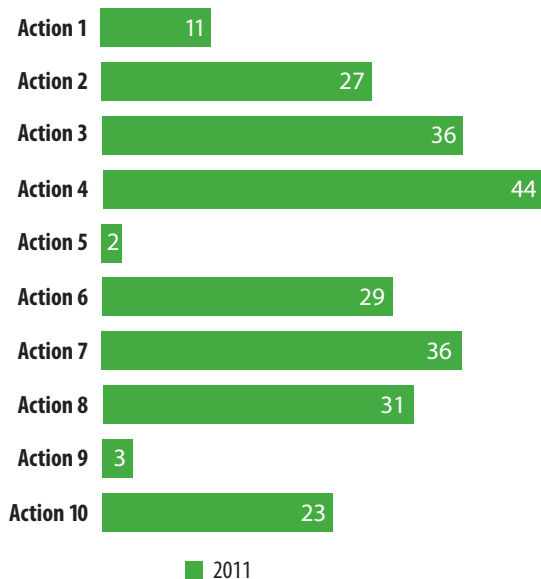
The good news is that every state now has the capacity to empower all stakeholders, from parents to policymakers, to use data to inform decisions that will improve student outcomes and system performance:

➔ **Better Data:** 36 states, up from zero when the Data Quality Campaign (DQC) launched in 2005, have implemented all 10 Essential Elements of Statewide Longitudinal Data Systems, and 51 states have implemented at least eight of the 10 Essential Elements. This means that, without exception, every state in the country has robust longitudinal data that extend beyond test scores and could inform today's toughest education decisions.

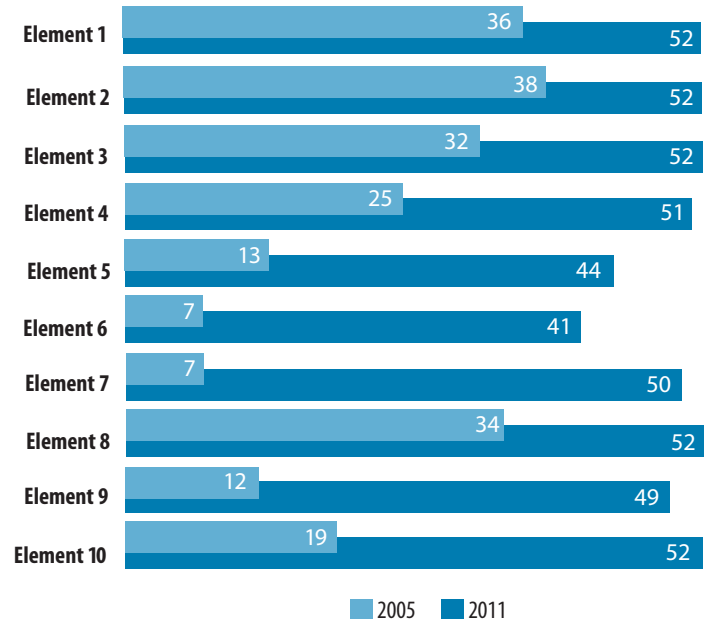
➔ **Improved Access:** States are not only collecting better data but also increasingly providing more robust and actionable longitudinal data to appropriate stakeholders:

- 36 states provide information on students' past performance that could allow teachers, parents and students to make informed decisions about individual students; and
- 33 states produce reports that measure growth of individual students over time, and 30 states aggregate this information — 23 of which make this aggregated information publicly available.

Number of States with Each State Action



Number of States with Each Essential Element



Note: 2011 is the final year that the DQC will measure states' progress on the 10 Essential Elements. See "About Data for Action 2011" on page 9.

➔ **Increased Awareness:** States are making this increased capacity known. **Forty-nine** states use outreach tools to communicate the availability of data to noneducator stakeholders, and **29** states provide training to noneducators on how to interpret and use the data to make informed decisions.

➔ **Long-Term Sustainability:** **36** states are planning for the future by enacting policies that create stable and sustained support for state longitudinal data systems, and **23** have policies that go beyond just building these systems to using the data to support informed decisions.

However, to leverage this increased capacity, the hard work remains. States must tackle tough issues to make effective data use a reality in education:

➔ **Turf:** The current culture and structures in education do not support working across traditional boundaries.

➔ **Trust:** Skepticism about the quality and use of data persists because data previously were primarily used as a hammer to punish rather than a flashlight to illuminate and inform continuous improvement.

Data Defined: Moving Beyond Test Scores

Data are much more than test scores. And they need to be used to answer critical questions, not just to check boxes on a list of requirements. The most useful data are:

- Longitudinal — follow individual students over time.
- Actionable — timely, user friendly and meaningful to users.
- Contextual — robust, comparable and presented as part of a bigger picture.
- Interoperable — matched, linked and shared across systems and sectors.

➔ **Technical Issues:** Technical issues remain; however, solutions are emerging and require the leadership and political will to implement them.

➔ **Time:** Competing priorities and scarce resources present challenges to continuing to allocate adequate time to building and using state longitudinal data systems.

States have not yet addressed these challenges to ensuring effective data use in education, as no state has implemented all 10 Actions.

Data for Action 2011 Key Findings

10 Actions and 10 Elements

The following analysis is part one of an ongoing series.¹ This analysis outlines states' greatest successes as well as the remaining challenges for building and leveraging longitudinal data systems to improve student achievement and system performance.

1 States are better positioned to inform policy discussions that promote readiness for kindergarten and college than for careers.

Success

Most states have the capacity to link data across the education data pipeline from early childhood through K–12 and into postsecondary to inform conversations about ensuring that students are prepared for kindergarten and college:

- ➔ The majority of states (**36**) annually match and share data with a known match rate between K–12 and early childhood and between K–12 and postsecondary.

Challenge

The majority of states do not have the capacity to inform efforts to prepare citizens for jobs because those states are unable to follow students into the workforce and understand the relationship between education and jobs:

- ➔ **41** states do not annually match and share data with a known match rate between K–12 and the workforce.
- ➔ **38** states do not annually match and share data with a known match rate between postsecondary and the workforce.

¹ Data for Action is a series of analyses that highlight state progress and key priorities to promote the effective use of longitudinal data to improve student achievement. Additional analyses about states' progress toward building and using data systems that can inform hot topics such as teacher effectiveness, college and career readiness, jobs creation, and empowering parents will be available on the DQC's website: www.DataQualityCampaign.org/stateanalysis/hot-topics.

2 States have built longitudinal data systems and established governance bodies, but these bodies have not yet tackled the full scope of turf, trust, technical and time issues.

Success

All states have built longitudinal systems that collect robust data beyond test scores and are increasingly recognizing the need to address remaining challenges around building and using state longitudinal data systems:

- ▶ **36** states have established *both* state education agency and cross-agency data governance entities.
- ▶ **10** states have established state education agency governance entities only.
- ▶ **Three** states have established cross-agency governance entities only.

Challenge

States have not yet leveraged their cross-agency bodies to tackle the toughest turf, trust, technical and time issues:

- ▶ **38** states have not established policies around sharing data across agencies.
- ▶ **36** states have not identified their critical questions to guide cross-agency data efforts.

3 States are increasingly providing stakeholders with appropriate access to data but are not building these stakeholders' capacity to effectively use the data to make decisions.

Success

States are increasingly ensuring that teachers and principals have access to appropriate student-level data that can inform instruction:

- ▶ **40** states provide access to student-level longitudinal data to principals and **28** to teachers.

States are also providing in-service training to teachers to leverage their enhanced data access:

- ▶ **40** states provide role-based training to educators on state-created longitudinal reports (e.g., feedback or growth reports).

Challenge

The majority of states need to do more to ensure that their educators are data literate before they enter the classroom:

- ▶ Only **10** states have policies requiring data literacy for both program approval and teacher and principal certification.

Too few states provide educator preparation programs with information about their graduates' performance, which is needed to improve program success:

- ▶ Only **six** states share teacher performance data with teacher preparation programs.

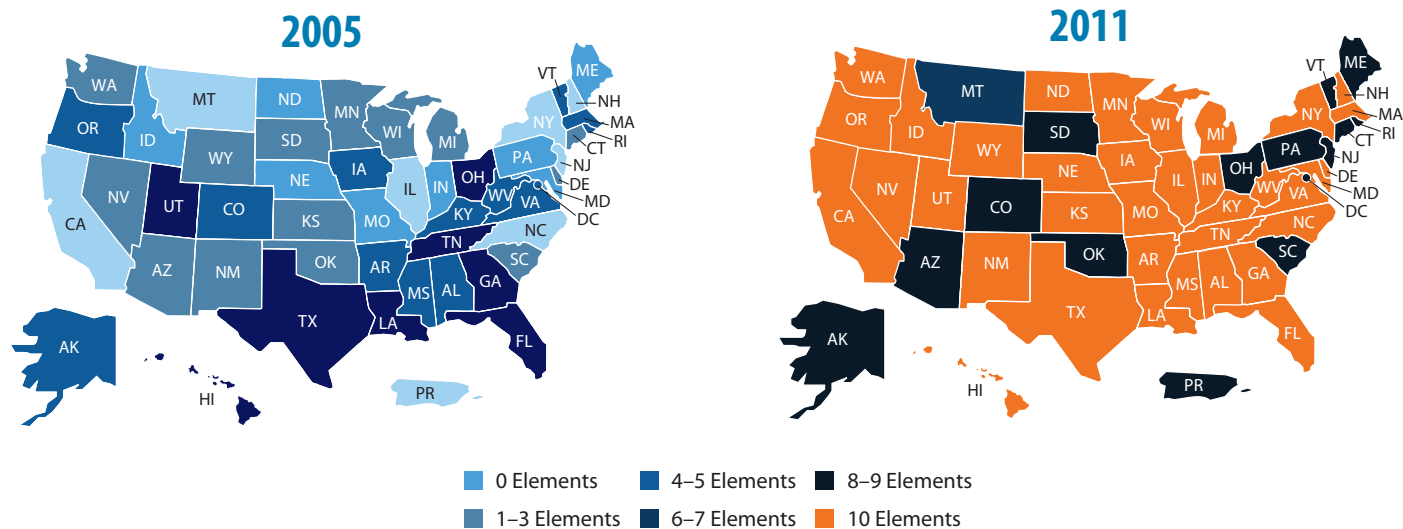
Conclusion

All states can realize the vision of effective data use in education, but the question looms: Will they? States have undoubtedly made tremendous progress, but the hardest work remains. The stakes have never been higher as policymakers and educators are asked to deliver all students a world-class education with fewer resources. The education sector will never reach this goal without effective data use and the political leadership to get us there.

Just the Facts: State of the States' Efforts To Support Effective Data Use

10 Essential Elements

Every State Has Longitudinal Data Systems that Collect Data Beyond Test Scores

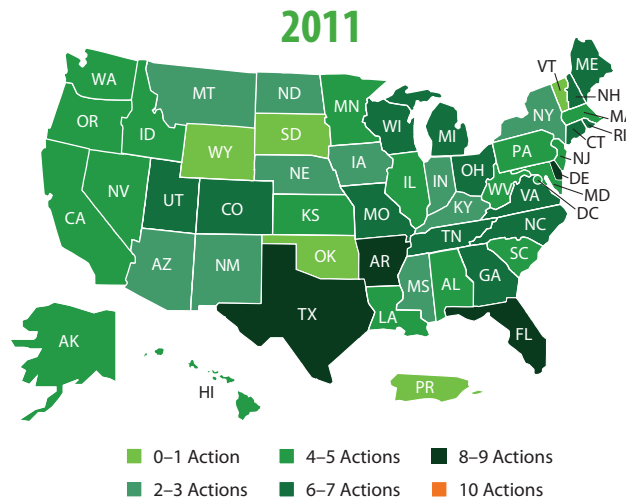


36 states have all 10 Elements as of 2011, up from zero in 2005.

Element	States
1. A unique student identifier	52
2. Student-level enrollment, demographic and program participation information	52
3. The ability to match individual students' test records from year to year to measure academic growth	52
4. Information on untested students and the reasons why they were not tested	51
5. A teacher identifier system with the ability to match teachers to students	44
6. Student-level transcript data, including information on courses completed and grades earned	41
7. Student-level college readiness test scores	50
8. Student-level graduation and dropout data	52
9. The ability to match student records between the P-12 and postsecondary systems	49
10. A state data audit system assessing data quality, validity and reliability	52

10 State Actions

States Have Not Enacted the Necessary Policies To Support Effective Data Use

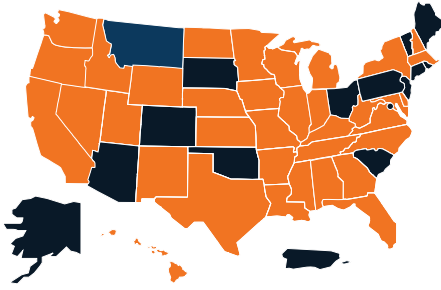


No state has all 10 State Actions.

Action	States
<i>Expand the ability of state longitudinal data systems to link across the P-20 education pipeline and across state agencies ...</i>	
1. Link state K-12 data systems with early learning, postsecondary education, workforce, social services and other critical agencies.	11
K-12 and early childhood data are annually matched and shared with a known match rate.	46
K-12 and postsecondary data are annually matched and shared with a known match rate.	38
K-12 and workforce data are annually matched and shared with a known match rate.	11
2. Create stable, sustained support for robust state longitudinal data systems.	27
The P-20/workforce state longitudinal data system (SLDS) is mandated or data system use is required in state policy.	36
The P-20/workforce SLDS receives state funding.	31
3. Develop governance structures to guide data collection, sharing and use.	36
A state education agency data governance committee is established.	46
A cross-agency data governance committee/council is established with authority.	39
4. Build state data repositories (e.g., data warehouses) that integrate student, staff, financial and facility data.	44
K-12 data repository is built and implemented.	44

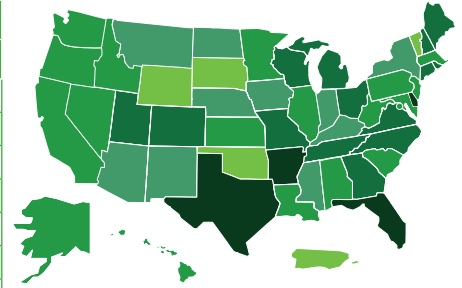
Action	States
<i>Ensure that data can be accessed, analyzed and used . . .</i>	
5. Implement systems to provide all stakeholders with timely access to the information they need while protecting student privacy.	2
Multiple levels or types of role-based access are established.	47
Appropriate stakeholders have access to student-level longitudinal data.	8
Superintendents, state policymakers, or state education agency staff and other stakeholders have access to aggregate-level longitudinal data.	37
State policy ensures that teachers and parents have access to their students' longitudinal data.	6
The state is transparent about who is authorized to access specific data and for what purposes.	17
6. Create progress reports with individual student data that provide information educators, parents and students can use to improve student performance.	29
The state produces reports using student-level longitudinal data.	34
Teachers and appropriate stakeholders have tailored reports using student-level longitudinal data.	32
7. Create reports that include longitudinal statistics on school systems and groups of students to guide school-, district- and state-level improvement efforts.	36
The state produces reports using aggregate-level longitudinal data.	39
State-produced reports using aggregate-level longitudinal data are available on a state-owned public website.	36
<i>Build the capacity of all stakeholders to use longitudinal data . . .</i>	
8. Develop a purposeful research agenda and collaborate with universities, researchers and intermediary groups to explore the data for useful information.	31
The state has developed a purposeful research agenda with other organizations.	36
The state has a process by which outside researchers can propose their own studies.	39
9. Implement policies and promote practices, including professional development and credentialing, to ensure that educators know how to access, analyze and use data appropriately.	3
Teachers and principals are trained to use longitudinal data to tailor instruction and inform schoolwide policies and practices.	39
Teachers and principals are trained to use and interpret specific reports.	38
The state plays an active role in training educators to use and interpret specific reports.	37
Preservice: Data literacy is a requirement for certification/licensure purposes.	11
Preservice: Data literacy training is a requirement for state program approval.	21
Data about educators are automatically shared at least annually with educator preparation programs.	21
Teacher performance data are shared with educator preparation programs.	6
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.	23
The state communicates the availability of data to noneducator stakeholders.	49
The state trains noneducator stakeholders on how to use and interpret data.	29
The state education agency makes data privacy and security policies public.	39

Individual State Progress: 10 Essential Elements



STATE	ELEMENTS										TOTAL
	1	2	3	4	5	6	7	8	9	10	
Alabama	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Alaska	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	8
Arizona	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Arkansas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
California	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Colorado	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	8
Connecticut	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	8
DC	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	8
Delaware	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Florida	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Georgia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Hawaii	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Idaho	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Illinois	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Indiana	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Iowa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Kansas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Kentucky	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Louisiana	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Maine	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Maryland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Massachusetts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Michigan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Minnesota	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Mississippi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Missouri	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Montana	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	7
Nebraska	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Nevada	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
New Hampshire	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
New Jersey	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	8
New Mexico	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
New York	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
North Carolina	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
North Dakota	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Ohio	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	9
Oklahoma	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Oregon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Pennsylvania	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Puerto Rico	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	8
Rhode Island	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
South Carolina	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	9
South Dakota	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	9
Tennessee	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Texas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Utah	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Vermont	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	8
Virginia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Washington	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
West Virginia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Wisconsin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Wyoming	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
TOTAL	52	52	52	51	44	41	50	52	49	52	

Individual State Progress: 10 State Actions



STATE	ACTIONS										TOTAL
	1	2	3	4	5	6	7	8	9	10	
Alabama	No	No	No	No	No	Yes	Yes	Yes	No	Yes	4
Alaska	Yes	No	No	Yes	No	No	Yes	Yes	No	No	4
Arizona	No	Yes	Yes	Yes	No	No	No	No	No	No	3
Arkansas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	9
California	No	No	Yes	Yes	No	No	Yes	No	No	Yes	4
Colorado	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	6
Connecticut	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	6
DC	No	Yes	Yes	No	No	Yes	Yes	No	No	No	4
Delaware	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	8
Florida	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	8
Georgia	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	7
Hawaii	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No	5
Idaho	No	Yes	Yes	Yes	No	Yes	No	No	No	No	4
Illinois	No	Yes	Yes	No	No	No	Yes	Yes	No	No	4
Indiana	No	No	Yes	Yes	No	No	Yes	No	No	No	3
Iowa	No	No	Yes	Yes	No	Yes	No	No	No	No	3
Kansas	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	5
Kentucky	No	No	Yes	Yes	No	No	No	No	No	No	2
Louisiana	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No	5
Maine	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	7
Maryland	Yes	No	Yes	Yes	No	No	Yes	No	No	No	4
Massachusetts	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No	5
Michigan	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	7
Minnesota	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No	5
Mississippi	No	No	Yes	Yes	No	No	No	No	No	No	2
Missouri	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	7
Montana	No	No	No	No	No	Yes	No	No	No	Yes	2
Nebraska	No	Yes	Yes	Yes	No	No	No	No	No	No	3
Nevada	No	No	No	Yes	No	Yes	Yes	Yes	No	Yes	5
New Hampshire	No	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	6
New Jersey	No	Yes	No	Yes	No	Yes	No	No	No	Yes	4
New Mexico	No	No	Yes	Yes	No	No	Yes	No	No	No	3
New York	No	Yes	No	Yes	No	No	No	Yes	No	No	3
North Carolina	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	7
North Dakota	No	Yes	Yes	No	No	No	No	No	No	No	2
Ohio	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	7
Oklahoma	No	No	No	No	No	No	No	No	No	No	0
Oregon	No	Yes	Yes	Yes	No	Yes	Yes	No	No	No	5
Pennsylvania	No	No	Yes	Yes	No	Yes	Yes	No	No	No	4
Puerto Rico	No	No	No	Yes	No	No	No	No	No	No	1
Rhode Island	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	7
South Carolina	No	No	No	Yes	No	No	Yes	Yes	Yes	No	4
South Dakota	No	No	Yes	No	No	No	No	No	No	No	1
Tennessee	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	7
Texas	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	8
Utah	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	7
Vermont	No	No	No	Yes	No	No	No	No	No	No	1
Virginia	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	6
Washington	Yes	Yes	Yes	No	No	No	Yes	Yes	No	No	5
West Virginia	No	Yes	Yes	Yes	No	Yes	No	Yes	No	No	5
Wisconsin	No	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	6
Wyoming	No	No	No	Yes	No	No	No	No	No	No	1
TOTAL	11	27	36	44	2	29	36	31	3	23	

About *Data for Action 2011: DQC's State Analysis*

Data for Action is a powerful tool to inform efforts in education to better use data in decisionmaking. It is a series of analyses that highlight state progress and key priorities to promote the effective use of longitudinal data to improve student achievement.

DQC's *State Analysis* annually measures the progress of all 50 states, the District of Columbia and Puerto Rico toward implementing the 10 Essential Elements of Statewide Longitudinal Data Systems and 10 State Actions To Ensure Effective Data Use and toward addressing other key data issues. States (typically designees of the governor's office) self-report on their ability to collect and use quality data to improve student achievement.

The 2011 *State Analysis*, the seventh annual edition, is the final year that DQC will measure states' progress toward the 10 Essential Elements. In September 2009, every state committed to implement the 12 America COMPETES Elements, which include DQC's 10 Essential Elements, and also publicly report this information. As a result, states are now reporting this information to the U.S. Department of Education, and the DQC will use those reports as the primary source of information about states' progress on building state longitudinal data systems.

To view the *Data for Action 2011* survey instrument and glossary as well as get more information about the alignment between DQC's 10 Essential Elements and the 12 America COMPETES Elements, please visit: www.DataQualityCampaign.org/stateanalysis/about.



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;
- ▶ Tools, materials, meetings and information that can aid states and interested organizations seeking to ensure increased quality, accessibility and use of data; and
- ▶ Data for Action 2011: DQC's State Analysis, which shows where your state stands on the 10 Essential Elements and the 10 State Actions;
- ▶ Information on how your organization can partner with the DQC to generate the understanding and will to build and use state longitudinal data systems.