



# Using Data To Increase College and Career Readiness

A Primer for State Policymakers

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**Today's global and knowledge-based economy demands that every student graduate from high school prepared for success in college and careers. Meanwhile, the nation's fiscal and economic environment means that states, districts and schools have fewer resources to allocate. These new expectations — to do more than ever before, and to do it with less — require systemic changes and recalibrating the K–12 education system to the goal of graduating every student college and career ready.**

Momentum for this work has been building for some time through various multistate initiatives that are helping states implement a college- and career-ready agenda. These initiatives typically support states in their efforts to:

- ▶ Establish college and career readiness as the goal for every student through standards, assessments, graduation requirements and school-level policies;
- ▶ Offer students multiple pathways to and options for college- and career-ready graduation; and
- ▶ Ensure that students stay on track to graduate college and career ready.

Longitudinal data are critical to informing the development, implementation and evaluation of these policies, as described in the continuous improvement graphic on the next page.

The good news is that over the last six years, states have made significant progress building statewide longitudinal data systems that have the potential to fuel this process with rich, timely and actionable data that can support decisionmaking and the college- and career-ready agenda.\*

To fulfill that potential, state leadership is needed to take the following key actions to ensure that the data are put to work:

- ▶ **Connect policy and data conversations:** Too often, in the quest to improve student outcomes, states' efforts on the policy and programmatic fronts are disconnected from their efforts on the data front. State policymakers and agency staff must work together to leverage expertise and resources across these disparate strategies and projects. Individuals leading efforts to design and implement college- and career-ready policies must actively use data to inform their decisionmaking. And individuals leading the work to develop and implement longitudinal data systems must actively maximize those investments to inform the college- and career-ready work.
- ▶ **Link data across the P–20/workforce spectrum:** A wealth of data is necessary to answer the critical questions. These questions will demand data that span multiple agencies,

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\* See *Data for Action 2011: DQC's State Analysis* for state-specific results.

## Continuous Improvement toward College and Career Readiness: The Role of Data

### Continuously evaluate system, program and policy success:

At every level, stakeholders need digestible, actionable and ongoing feedback to understand if they were successful and adjust their approach. This feedback is especially important in today's fiscal and economic climate in which policymakers and leaders at all levels must make difficult decisions about allocating resources effectively and efficiently. Longitudinal data are critical to conduct the research, analyses and evaluations necessary to understand system successes, challenges and opportunities for improvement.

### Implement policies and help students and educators meet goals:

In this new environment, educators and students are held to new and higher expectations. Longitudinal data are critical to providing educators, parents and students timely and actionable information to inform their behavior and keep students on track to college- and career-ready graduation.

### Align goals, policies and systems:

Policy makers are charged with recalibrating the K–12 education system and policies to ensure that every student graduates college and career ready. To meet this goal, longitudinal data are critical to help policymakers better understand which policies need to be created or changed.

sectors and data systems. State leadership is necessary to address the political, policy and technical challenges to linking data systems across the P–20/workforce spectrum.

- ▶ **Share data across state lines:** Students are increasingly mobile. According to the U.S. Census, 15 to 20 percent of school-age children moved in the previous year, and National Association of College Admissions Counselors found that one-third of students who start at a two- or four-year institution transfer to another school before they earn a bachelor's degree. There are also large populations of students who graduate from high school, participate in

higher education and participate in the workforce in multiple states. State leaders must collaborate to facilitate the sharing of limited, appropriate data across state lines.


- ▶ **Build state capacity for analysis and research:** The critical work of turning *data* into *actionable information* takes time, expertise and resources. In the past, when data use was predominantly focused on mandated compliance reporting, limited access to analysts might have sufficed. Today, the full power of state longitudinal data systems cannot be realized without engaging education analysts and researchers as part of a robust team to turn the data into

useful information for policymakers and practitioners. State leaders must ensure that they have the internal capacity for research and analysis and engage stakeholders to identify the most pertinent policy, practice and data questions; prioritize research and analytical activities; and guide communication about the use of the information.

- ▶ **Get the right data to the right people at the right time:** Data are only useful if people are able to access, understand and use them. To ensure the investments in statewide longitudinal data systems are maximized and leveraged, state policymakers must ensure stakeholders have access to timely, readily available and easy-to-understand information. States must also communicate and build awareness of the available information and analyses, so stakeholders know how to access it and use it responsibly.

State policymakers leading efforts around a college- and career-ready agenda must be champions for the effective and efficient use of longitudinal data. To help ensure every stakeholder is “pulling in the same direction” to meet the goal of graduating every student ready for college and career, state policymakers must:

- 1. Identify the critical questions they need to answer** to design, implement and evaluate the state’s college- and career-ready agenda.



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- 2. Ensure that the state has the data capacity** to give them the answers they need to inform the college- and career-ready agenda.
- 3. Put the data to work** to inform the critical decisions that support college and career readiness for every student.

This publication provides state policymakers with a roadmap for discussions with key stakeholders to ensure that their states have the data capacity to inform, implement and evaluate their college- and career-ready agenda. Examples can be found on the DQC’s website at [www.DataQualityCampaign.org/resources/field\\_profiles](http://www.DataQualityCampaign.org/resources/field_profiles). To get the process started, the DQC also has created *Using Data To Increase College and Career Readiness: A Checklist for States*, which can serve as a guide to the key considerations policymakers must address as they develop college- and career-ready policies. A sample of the checklist is on page 5, and states can download a version for their own use at [www.DataQualityCampaign.org/resources/CCRchecklists](http://www.DataQualityCampaign.org/resources/CCRchecklists).

# Nearly Every Emerging College and Career Readiness Strategy Being Implemented in States and Districts Requires Longitudinal Data or Data Systems

## States and districts are implementing a number of emerging strategies to improve students' college and career readiness:

Establishing college and career readiness as the goal for every student through standards, assessments, graduation requirements and school-level policies by:

- Establishing **standards** aligned to the demands of college and careers;
- Aligning **high school graduation requirements** to college and career readiness;
- Implementing **college and career readiness assessments** that are aligned to the standards;
- Using college and career readiness assessment results at the postsecondary education level to make decisions about students' **acceptance and placement**; and
- Developing **college and career readiness indicators** for public reporting, determining goals and benchmarks, inclusion in accountability formulas that trigger rewards and consequences, and school improvement planning processes.

Offering students multiple pathways to and options for a college- and career-ready graduation through:

- **Dual enrollment** opportunities for them to gain credit in postsecondary education coursework while still enrolled in high school;
- **High-quality alternative settings** that provide off-track students with the flexible schedules, credit recovery options and wraparound services unique to their needs; and
- **Career and technical education experiences, internships, and certificate opportunities** that are aligned to high-need industries.

Ensuring students stay on track to graduate college and career ready by:

- Implementing **early warning and intervention systems** that identify students who are most at risk of dropping out or are off track for college and career readiness and trigger prevention, intervention and recovery strategies;
- Encouraging students **to enroll and succeed in college- and career-ready courses**; and
- **Reducing financial and administrative barriers** to applying to college or for financial aid.

## All of these strategies require longitudinal data or data systems to:

- Provide the **evidence base regarding the skills and content knowledge necessary for success in college and careers**, and ensure that the standards, assessments, graduation requirements and related policies evolve over time to keep pace with these changing demands.
- **Understand the relationships** among course labels, grades, course completion, exam results and postsecondary success. This information can be used to improve the substance; the quality; the academic intensity; and ultimately, the degree to which instruction and coursework prepare students for college and careers.
- **Produce college- and career-ready indicators and high school feedback reports** that help diagnose the nature of academic problems in low-performing high schools, unearth systemic weaknesses and guide improvement efforts. States have more capacity than districts and schools to secure student outcome data from postsecondary education and the workforce, particularly from other states.
- **Link information from various systems and providers so that a student's academic history can be captured efficiently and effectively.**
- **Understand and develop options to address the unique needs of off-track students.**
- **Reveal industry and employment patterns** that should be used to prioritize career and technical education, internship, and certificate opportunities.
- **Measure the impact of programs, strategies and policies on students' postsecondary outcomes.**
- **Identify risk factors for dropping out and benchmarks for college and career readiness.** States can address many districts' lack of analytical capacity by doing this work at the state level.
- **Identify students who are off track** according to dropout risk factors or college and career readiness benchmarks. States should produce and disseminate customizable analyses or standardized early warning reports for districts and schools.
- **Notify students (and their parents and counselors) when they are eligible for merit-based aid.**
- Seamlessly **provide students' transcript information to college admission systems.**

# Does Your State Have the Necessary Data Capacity?

The checklist below serves as a guide to the key considerations policymakers must address as they develop policies to ensure that every student graduates college and career ready. The “National Landscape” numbers indicate how many states report “yes” based on *Data for Action 2011: DQC’s State Analysis*. **How does your state fit into this landscape?**

STATE ROLE	STATE RESPONSIBILITIES	NATIONAL LANDSCAPE
Articulate Vision for College and Career Readiness	Identify the critical questions necessary to design, implement and evaluate the state’s college- and career-ready agenda.	<ul style="list-style-type: none"> <li>✓ 28 state education agencies</li> <li>✓ 16 cross-agency</li> </ul>
	Create a cross-agency data governance structure.	✓ 39 states
Ensure That the Necessary Data Are Collected To Inform and Used To Implement Your College and Career Readiness Policies and Practices	<b>Collect the necessary K–12 student-level information:</b> <ul style="list-style-type: none"> <li>✓ Unique student identifiers.</li> <li>✓ Enrollment, demographic and program participation (e.g., poverty, second language learner and disability status).</li> <li>✓ Graduation and dropout information (e.g., dropout status and codes; completion dates; and credential, certificate or diploma types).</li> <li>✓ Assessment information (e.g., college admission and placement and statewide assessments), including information on untested students.</li> <li>✓ College-ready course information (i.e., enrollment/grades that have been defined by the state as required for college preparation).</li> <li>✓ Statewide course classification system.</li> <li>✓ High school GPA.</li> <li>✓ High school credit accumulation.</li> <li>✓ Participation in dual enrollment programs.</li> <li>✓ Participation in career and technical education programs.</li> <li>✓ Participation in apprenticeship, internship or job-training programs.</li> <li>✓ Eligibility for state or federal aid or merit-based aid (e.g., state scholars program).</li> </ul>	<ul style="list-style-type: none"> <li>✓ 52 states</li> <li>✓ 52 states</li> <li>✓ 52 states</li> <li>✓ 50 states</li> <li>✓ 26 states</li> <li>✓ 40 states</li> <li>✓ 21 states</li> <li>✓ 25 states</li> <li>✓ 35 states</li> <li>✓ 44 states</li> <li>✓ 16 states</li> <li>✓ 15 states</li> </ul>
	<b>Link K–12 student records with limited postsecondary education and workforce data:</b> <ul style="list-style-type: none"> <li>✓ Enrollment information.</li> <li>✓ Remediation status.</li> <li>✓ Transcript data.</li> <li>✓ Persistence/exit status.</li> <li>✓ Earnings and wages.</li> <li>✓ Employment status.</li> <li>✓ Industry of employment.</li> </ul>	<ul style="list-style-type: none"> <li>✓ 42 states</li> <li>✓ 30 states</li> <li>✓ 28 states</li> <li>✓ 40 states</li> <li>✓ 13 states</li> <li>✓ 16 states</li> <li>✓ 12 states</li> </ul>
	Share necessary data across state lines to provide valuable feedback regarding students who have participated in education or the workforce out of state.	✓ 11 states
	Analyze, Report and Communicate Information to Key Stakeholders To Ensure That Every Student’s Trajectory To Graduate College and Career Ready Is Clear	<b>Disseminate information:</b> <ul style="list-style-type: none"> <li>✓ Early warning dropout reports (student level).</li> <li>✓ High school feedback reports (school and district level).</li> <li>✓ Students’ eligibility for state or federal need- or merit-based aid.</li> <li>✓ Electronic means to pull, request or submit transcript information for students’ applications to college or for state or federal need- or merit-based aid.</li> <li>✓ Students’ progress on meeting state college enrollment and placement requirements.</li> </ul>

States can download a version of this checklist for their own use at [www.DataQualityCampaign.org/resources/CCRchecklists](http://www.DataQualityCampaign.org/resources/CCRchecklists).

# Additional Resources

## State examples

- ▶ See the DQC's website at [www.DataQualityCampaign.org/resources/field\\_profiles](http://www.DataQualityCampaign.org/resources/field_profiles).

## Reports and briefs

- ▶ *Preparing Every Citizen for the Knowledge Economy: A Primer on Using Early Childhood, K–12, Postsecondary and Workforce Data*, 2011, [www.DataQualityCampaign.org/resources/details/1426](http://www.DataQualityCampaign.org/resources/details/1426).
- ▶ *Leveraging the Power of State Longitudinal Data Systems: Building Capacity To Turn Data into Useful Information*, 2011, [www.DataQualityCampaign.org/files/DQC-Research\\_capacity\\_May17.pdf](http://www.DataQualityCampaign.org/files/DQC-Research_capacity_May17.pdf).
- ▶ *Data for Action 2011: DQC's State Analysis*, [www.dataqualitycampaign.org/stateanalysis/executive\\_summary/](http://www.dataqualitycampaign.org/stateanalysis/executive_summary/).
- ▶ *Creating Reports Using Longitudinal Data*, 2010, [www.DataQualityCampaign.org/resources/details/1065](http://www.DataQualityCampaign.org/resources/details/1065).
- ▶ *Measuring the Education Pipeline: Common Data Elements Indicating Readiness, Transition and Success*, 2010, [www.DataQualityCampaign.org/resources/details/646](http://www.DataQualityCampaign.org/resources/details/646).
- ▶ *Linking Data Across Agencies: States That Are Making It Work*, 2010, [www.DataQualityCampaign.org/resources/details/699](http://www.DataQualityCampaign.org/resources/details/699).
- ▶ *Do "College-Preparatory" Courses Live Up to Their Labels? Using Statewide Longitudinal Data Systems To Assess the Rigor of Academic Courses*, 2008, [www.DataQualityCampaign.org/files/publications-dqc\\_college\\_prep\\_courses-101308.pdf](http://www.DataQualityCampaign.org/files/publications-dqc_college_prep_courses-101308.pdf).
- ▶ *Connecting Policy and Data: Determining Your State's Killer Questions*, 2009, [www.DataQualityCampaign.org/resources/details/442](http://www.DataQualityCampaign.org/resources/details/442).
- ▶ *They Can Pass, but Are They College Ready?* 2008, [www.DataQualityCampaign.org/resources/details/310](http://www.DataQualityCampaign.org/resources/details/310).
- ▶ *How ACT, SAT and AP Results Can Increasingly Inform Policymaking, School Improvement and Student College Readiness*, 2008, [www.DataQualityCampaign.org/resources/details/249](http://www.DataQualityCampaign.org/resources/details/249).



To download DQC resources, visit [www.DataQualityCampaign.org](http://www.DataQualityCampaign.org) and follow us on Twitter (@EdDataCampaign).

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.