Leveraging Federal Funding for Longitudinal Data Systems

FISCAL YEAR 2011



www.DataQualityCampaign.org

Reaching Your Destination

Over the last six years, state leaders have made significant progress building and implementing statewide longitudinal data systems. However, states have not yet leveraged the full potential of these systems to improve decisionmaking aimed at raising student achievement and systemwide performance. Leveraging this potential is more important than ever given the demand to meet continuously increasing expectations with fewer resources.

Collecting data alone will not help us reach this goal. States also must have policies and practices that create a culture of effective data use and ensure that stakeholders throughout the education system have appropriate access to timely data they can understand and have the capacity to use.

Reaching this destination requires political leadership, a shared statewide vision for education across the human capital spectrum and interagency collaboration.

MAPPING YOUR ROUTE

Identifying Your State's Critical Policy Questions and the Data Needed To Answer Them

To ensure that investments in statewide longitudinal data systems are designed and used for continuous improvement, state policymakers need to identify and focus on the critical questions that are necessary to effectively manage their education system and improve student achievement.

The questions below, though not exhaustive, demonstrate how statewide longitudinal data systems can inform critical policy questions facing state leaders today:

- Are my state's policies and data systems aligned to ensure that expectations in P-12 support student success in postsecondary education and in the workplace?
 - What percentage of students graduate, according to the four-year cohort graduation rate required by the 2008 federal regulations?
 - What percentage of students require remediation in postsecondary institutions?
 - What percentage of students have taken the necessary coursework and exams to prepare them for college and work, and what were their achievement levels?
 - What achievement levels in grades 3 through 7 indicate that a student is on track for later success?
- 2. Is my state holding schools and districts accountable for student growth?
 - Do we know what factors contribute to the highest amount of growth?
 - How many students are achieving at least one year's academic growth every year?

- Which schools produce the strongest academic growth among initially poorly prepared students and among initially well-prepared students?
- Which teachers consistently achieve the most individual student growth in their classrooms?
- 3. Do my state's policies ensure a measurably effective educator workforce?
 - Are these efforts evaluated to ensure that every student has an effective teacher?
 - Which educator preparation pathways and institutions produce more effective teachers as measured by student performance?
 - What percentage of students were assigned an ineffective teacher two or more years in a row as measured in part by a value-added model?
 - Which professional development programs have the greatest impact on the effectiveness of teachers as measured by student performance?
 - What percentage of principals increased the overall effectiveness of their teachers and schools as measured by student performance?
- 4. Does my state prioritize resources to target programs and practices that improve student achievement?
 - In which classes, grades and schools does class size have a measurable impact on student achievement?
 - Which teachers are most effective with larger classrooms?
 - How do the achievement levels and outcomes of students enrolled in online/virtual courses compare to those of students enrolled in traditional courses?
 - How does dual enrollment affect student outcomes?

10 Essential Elements of a Longitudinal Data System

- A unique statewide student identifier that connects student data across key databases across years (52 states report having this Element, up from 37 in 2005)
- 2 Student-level enrollment, demographic and program participation information (52 states, up from 40 in 2005)
- 3 The ability to match individual students' test records from year to year to measure academic growth (52 states, up from 33 in 2005)
- 4 Information on untested students and the reasons they were not tested (51 states, up from 27 in 2005)
- 5 A teacher identifier system with the ability to match teachers to students (44 states, up from 14 in 2005)
- **6** Student-level transcript information, including information on courses completed and grades earned (41 states, up from 8 in 2005)
- 7 Student-level college readiness test scores (50 states, up from 7 in 2005)
- 8 Student-level graduation and dropout data (52 states, up from 36 in 2005)
- **9** The ability to match student records between the P–12 and postsecondary systems (49 states, up from 12 in 2005)
- A state data audit system assessing data quality, validity and reliability (52 states, up from 23 in 2005)

Data for Action 2011: DQC's State Analysis was released in December 2011. Visit www.DataQualityCampaign.org to see how many of the 10 Essential Elements and 10 State Actions your state has.

10 State Actions To Ensure Effective Data Use

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 childhood, postsecondary education, workforce, social services and other critical state agency data systems. (11 states report this Action, as of 2011)
- 2 Create stable, sustained support for robust state longitudinal data systems. (27 states)
- **3** Develop governance structures to guide data collection, sharing and use. (*36 states*)
- **4** Build state data repositories (e.g., data warehouses) that integrate student, staff, financial and facility data. (44 states)

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. (2 states)
- 6 Create progress reports with individual student data that provide information educators, parents and students can use to improve student performance. (29 states)
- 7 Create reports that include longitudinal statistics on school systems and groups of students to guide school-, district- and state-level improvement efforts. (36 states)
- 8 Develop a purposeful research agenda and collaborate with universities, researchers and intermediary groups to explore the data for useful information. (31 states)
- 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 states)
- 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 states)

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

PACKING YOUR BAG

Ensuring Your State Has a Plan for Success

To help ensure that the right people, policies and processes are in place to maximize federal funding to support your state's agenda:

- Identify agencies and specific individuals in your state who are in charge of each of the programs and funding sources illustrated in this roadmap.
- Establish and leverage data governance teams within the state education agency and across agencies
 with policy leaders, program staff, and data and technology specialists to develop coherent, coordinated applications for federal funds.
- Seek broad stakeholder input to create a list of priority questions that your state needs to answer to effectively manage its human capital strategy.
- Leverage federal funds to ensure that your statewide longitudinal data systems include the necessary data to answer those priority questions and to implement the Data Quality Campaign's (DQC's) 10 Essential Elements and 10 State Actions To Ensure Effective Data Use.
- Consider collaborating with other states to use federal funds to achieve interoperable systems that can answer appropriate questions about students who move across state lines.

FUELING UP

Maximizing Federal Funding for the P—20/Workforce Data Pipeline

The federal government funds numerous programs and activities, administered by different departments and agencies, that states can leverage to further develop and coordinate various statewide data systems and promote actions that would lead to the effective use of data. This roadmap (and the continuously updated web version at www.DataQualityCampaign.org/Roadmap) identifies federal funding opportunities that states can maximize to support activities to collect and use longitudinal data to improve student outcomes. It provides a starting point for states' planning by identifying federal

This DQC analysis includes current funding information and a "tip" for how states might be able to maximize funds to support activities aimed at collecting and using longitudinal data to improve student outcomes. This information is drawn from federal

U.S. DEPARTMENT OF EDUCATION (ED)

(a) CARL D. PERKINS CAREER AND TECHNICAL **EDUCATION IMPROVEMENT (TITLE I)**

\$1.1 billion

Eligible Entities: State Education Agencies; Subgrants to Local Education Agencies Formula Grants

Title I of the Carl D. Perkins and Technical Education Act of 2006 established grants for states to expand and improve career and technical education in high schools, technical schools and community colleges. Perkins requires states to collect and report student outcome information from both K–12 and postsecondary activities. States may reserve 10 percent of funds for leadership activities that "may include developing and enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes" and 5 percent for administrative activities. *Data tip: States should use this funding to leverage or* coordinate activities with existing investments in statewide longitudinal data systems.

(b) IDEA PART B (AGES 3-21) — **GRANTS TO STATES**

\$11.5 billion

Eligible Entities: State Education Agencies; Subgrants to Local Education Agencies

The Individuals with Disabilities Education Act (IDEA) Part B, Section 611 provides formula grants to the 50 states, the District of Columbia, Puerto Rico, the secretary of the interior, outlying areas and the freely associated states. These grants help states meet the excess costs of providing special education and related services to children with disabilities ages 3–21.

IDEA authorizes ED to use a portion of these funds to help states meet their data collection requirements. FY2011 funding included a \$25 million set-aside. ED will likely use some of the nonobligated funds from this set-aside to make investments in data systems for Part C of IDEA (see below), data collection resources for federal IDEA data requirements and technical assistance for data analysis to help states and local education agencies improve outcomes for students with disabilities. The investments in Part C data systems will likely be used to help states develop data systems that collect, analyze and report infant and toddler outcome data and develop modified assessment measures of student growth to be used in growth-based accountability models. At this time, eligible entities have not been determined for these investments. Data tip: States should use these Part B funds to leverage or coordinate data collection or data systems activities with existing investments in statewide longitudinal data systems and ensure appropriate linkages between early childhood and K $-12\,data$.

(c) IDEA PART C (AGES 0-3) — **GRANTS TO STATES**

\$438.5 million

Eligible Entities: State Education Agencies; Subgrants to Local Education Agencies

The Individuals with Disabilities Education Act (IDEA) Part C provides formula grants to the 50 states, the District of Columbia, Puerto Rico, the secretary of the interior and outlying areas to help states identify and serve students with disabilities during their first three years of life. Under Part C of IDEA, states must maintain and implement a statewide system to help identify infants and

funding sources that can be used for data-related activities.

legislation, statute, guidance or program information.

toddlers for early intervention services and connect them with service providers. States may also use these funds to strengthen their statewide systems by establishing linkages to public or private community-based organizations, services and personnel to improve services to at-risk infants and toddlers. Data tip: States should use these Part C funds to leverage or coordinate data

systems and ensure appropriate linkages between early childhood and K–12 data.

collection or data systems activities with existing investments in statewide longitudinal data

(d) RACE TO THE TOP — STEM

\$200 million

EARLY CHILDHOOD (BIRTH-SCHOOL)

(c) IDEA PART C (AGES 0-3) | \$438.5 MILLION

e) RACE TO THE TOP — EARLY LEARNING | \$500 MILLION

Eligible Entity: State Agencies Competitive Grants

Race to the Top (RTT) seeks to create incentives for comprehensive state and local reforms and innovations that lead to significant educational improvements. While each round of RTT grants has had a slightly different focus, they all concern RTT's four reform areas, one of which is to "build data systems that measure student growth and success, and inform teachers and principals about how they can improve instruction." On Sept. 7, 2011, ED announced proposed requirements for Race to the Top Round 3 STEM (RTT3-STEM) grants. According to the proposed requirements, nine states that had not previously received RTT funds would be eligible to apply for RTT3-STEM grants to support a portion of their previously submitted RTT plans, including a meaningful focus on science, technology, engineering and mathematics (STEM) education. In addition to this focus, applicants would need to maintain their commitment to the assurances and reform conditions in place for previous rounds of RTT grants. Data tip: Public comments to the proposed requirements are due October 11, 2011, and final application requirements will follow. States should leverage this funding opportunity to coordinate and enhance statewide longitudinal data systems (SLDS) to support the STEM-focused activities and coordinate efforts with other federally funded efforts such as SLDS grant funds.

(e) RACE TO THE TOP — **EARLY LEARNING CHALLENGE**

\$500 million

Eligible Entities: Governors Competitive Grants

The Race to the Top — Early Learning Challenge competition, to be jointly administered by ED and the Department of Health and Human Services, focuses on five areas of state reform to improve early learning and development programs: (1) successful state systems; (2) high-quality, accountable programs; (3) promoting early learning and development outcomes for children; (4) early childhood education workforce; and (5) measuring outcomes and progress. As part of the selection criteria, states must demonstrate their current status in developing early learning and

development data systems according to a set of defined Essential Data Elements for children, program and workforce information; including kindergarten entry assessment results in the statewide longitudinal data system (SLDS); and implementing effective data practices as part of their Tiered Quality Rating and Improvement System (QRIS). Additionally, one of two ways that states' proposed plans can meet the selection criteria for measuring outcomes and progress is through building or enhancing an early learning data system to improve instruction, practices, services and policies. These data systems must be coordinated and interoperable with a state's existing SLDS; include the seven Essential Data Elements; enable uniform data collection; use standard structures, data formats and data definitions to ensure interoperability with other systems; generate timely, relevant and accessible information; and comply with privacy laws. States receiving grants must also have SLDSs that include the 12 America COMPETES Act elements; comply with federal, state and local privacy laws; and provide researchers with appropriate access to data from their QRIS, SLDS and coordinated early learning data systems to answer key policy and practice questions. Data tip: Applications are due October 19, 2011, and awards will be announced in December 2011. States should leverage this funding opportunity to coordinate and enhance existing early learning data systems that link with K–12, fill data gaps as determined by the states' critical policy questions, and coordinate efforts with other federally funded efforts such as SLDS grant funds.

) IDEA PART B (AGES 3–21) | \$11.5 BILLION

1) ESEA, TITLE I, PART A | \$14.5 BILLION

(i) CHILD CARE AND DEVELOPMENT BLOCK GRANT | \$2.2 BILLION

(j) HEAD START AND EARLY HEAD START | \$7.6 BILLION

(f) STATEWIDE LONGITUDINAL DATA SYSTEMS

\$42.2 million

Eligible Entities: State Education Agencies Competitive Grants

The Educational Technical Assistance Act authorizes competitive grants to state education agencies to support the design, development and implementation of statewide longitudinal data systems that manage, analyze, disaggregate and use individual student data. The overarching goals of the program are to improve the collection and use of data, promote data quality, and promote linkages to share data across states to improve student achievement. FY2011 funding supports continuation funds for existing grants, so there will be no new competition in FY2011.

(q) TEACHER INCENTIVE

\$399.2 million

Eliaible Entities: State Education Agencies Competitive Grants

The Teacher Incentive Fund authorizes competitive state grants to improve student achievement by improving teacher and principal effectiveness; linking teacher and principal compensation to student achievement gains; increasing the number of effective teachers in

low-income communities and in hard-to-staff subjects; and creating sustainable performancebased compensation systems. Data tip: States should leverage these funds for activities that improve the quality of individual student data and linkages between teacher and student data. Information is not yet available about competitions using these funds.

Updated December 2011: For the latest information and links to the specific legislation and guidance, please visit the interactive version of this roadmap on our website at www.DataQualityCampaign.org/Roadmap.

CARL D. PERKINS CAREER AND TECHNICAL EDUCATION IMPROVEMENT | \$1.1 BILL

(d) RACE TO THE TOP — STEM | \$200 MILLION

(f) STATEWIDE LONGITUDINAL DATA SYSTEMS | \$42.2 MILLION

(h) ESEA, TITLE I.

K-12

a) TEACHER INCENTIVE FUND | \$399.2 MILLION

\$14.5 billion

POSTSECONDARY

Eligible Entities: State Education Agencies; Subgrants to Local Education Agencies

Title I, Part A funds require state activities in the areas of standards, assessments, accountability, teacher quality and school improvement. States may reserve some funds to provide technical assistance and support to local education agencies. At the district and school level, Title I funds are intended to provide supplemental funding for high-poverty schools and support activities to help all students meet challenging academic standards. *Data tip: State and local education* agencies should use Title I funding to support the use of data as part of school and program improvement activities

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

(i) CHILD CARE AND DEVELOPMENT **BLOCK GRANT**

2011 APPROPRIATION \$2.2 billion

Eligible Entities: State Education Agencies Formula Grants

The Child Care and Development Block Grant authorizes the Child Care Development Fund (CCDF) The goal of this fund is to improve the quality of child care and promote coordination among early childhood development and afterschool programs. The CCDF is composed of three funding streams: mandatory, matching and discretionary. Although these funding streams can generally be used for the same purposes, states must abide by different fiscal rules and regulations for each of the streams. A minimum of 4 percent of CCDF must be used to improve the quality of child care and other additional services to parents. Data tip: States should use part of the funding allocated for quality activities to support building, linking and using state early care and education data systems with their K—12 and Quality Rating and Improvement systems. These linkages will help states evaluate and improve early childhood program quality and early childhood workforce registries. Activities should be coordinated with other state activities, such as the State Advisory Councils.

(i) HEAD START AND **EARLY HEAD START**

\$7.6 billion

Education

Eligible Entities: Public and Private Nonprofit and For-Profit Agencies

The Head Start program provides grants to local public and private nonprofit and for-profit agencies to provide economically disadvantaged children and families comprehensive early childhood development services focused on preschool education and skills that are necessary for school success.

(k) WORKFORCE DATA QUALITY INITIATIVE | \$12.2 MILLION

(I) WORKFORCE INNOVATION FUND | \$125 MILLION

(m) WORKFORCE INVESTMENT ACT (WIA) | \$2.7 BILLION

The Improving Head Start Act of 2007 called for the establishment of State Early Childhood Advisory Councils to improve the quality, availability and coordination of programs and services for children ages birth to 5. Among other activities, the councils develop recommendations for high-quality early childhood care and education programs; conduct periodic needs assessments of the quality and availability of programs; and advise state policymakers on the development of a comprehensive childhood data system, statewide development system and research-based early learning standards. Through funding from the American Recovery and Reinvestment Act (ARRA) of 2009, 45 states and five territories received a total of \$100 million in noncompetitive three-year start-up grants to support the councils, for which states contributed a 70 percent match. Data tip: The FY2011 appropriation did not include line-item funding for the State Advisory Councils (SACs), but the work of the SACs is still under way due to one-time ARRA funds. States should use this funding to leverage or coordinate activities with existing investments in statewide longitudinal data systems and ensure appropriate linkages between early childhood and K-12 data.

U.S. DEPARTMENT OF LABOR

(k) WORKFORCE DATA QUALITY INITIATIVE

\$12.2 million

Eligible Entity: State Workforce Agencies Competitive Grants

Authorized under the Workforce Investment Act, the Workforce Data Quality Initiative provides competitive grants to support the development of longitudinal data systems that integrate education and workforce data. Data tip: States should apply for funds to enhance their workforce data systems and build linkages with K–12 and postsecondary education data. Information is not yet available about competitions using these funds. It is expected that applications will be

(I) WORKFORCE INNOVATION

U.S. Department of U.S. Department of U.S. Department of

Health and Human

WORKFORCE

\$125 million

Eligible Entities: State Education Agencies and Regions Competitive Grants

The Workforce Innovation Fund will be jointly administered by the U.S.Department of Labor and the U.S. Department of Education and will encourage collaboration across multiple programs. The fund will award competitive grants to states and regions for bold system reforms that will deliver better employment and education results, especially for vulnerable populations. Program details are still being developed with the application opening in fall 2011 and funds awarded in December 2011. Data tip: States should consider using these funds to streamline their longitudinal data systems to achieve better em<mark>ploym</mark>ent and education outcomes. Information is not yet available about competitions using these funds.

(m) WORKFORCE INVESTMENT ACT (WIA)

\$2.7 billion

Eligible Entities: State Agencies; Subgrants to Local Areas

The Workforce Investment Act (WIA) authorizes three separate formula funding streams for programs serving adults (\$771 million), dislocated workers (\$1.1 billion) and youth (\$827.6 million). For each of these funding streams, states may set aside 5 percent for statewide workforce investment activities and up to 25 percent of the dislocated worker allocation for statewide rapid response activities. Data tip: States should consider using a portion of their set-aside funds to enhance their data collection systems by creating linkages with education data to better report on one of WIA's core indicators — "attainment of a recognized credential relating to achievement of educational skills, which may include attainment of a secondary school diploma or its recognized equivalent, or occupational skills, by participants who enter unsubsidized employment, or by participants who are eligible youth age 19 through 21 who enter postsecondary education, advanced training, or unsubsidized employment."

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 2011: 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.

