U.S. Department of Education
September 2015

State, District, and School Implementation of Reforms Promoted Under the Recovery Act: 2009-10 through 2011-12

The Final Report From Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role

Patricia Troppe
Anthony Milanowski
Roberta Garrison-Mogren
Ann Webber
Babette Gutmann
Westat

Elizabeth Reisner
Policy Studies Associates

Margaret Goertz
Independent Consultant

Meredith Bachman
Project Officer
Institute of Education Sciences

ies INSTITUTE OF EDUCATION SCIENCES

NATIONAL CENTER FOR EDUCATION EVALUATION AND REGIONAL ASSISTANCE

State, District, and School Implementation of Reforms Promoted Under the Recovery Act: 2009-10 through 2011-12

The Final Report From Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role

Patricia Troppe
Anthony Milanowski
Roberta Garrison-Mogren
Ann Webber
Babette Gutmann
Westat

Elizabeth Reisner
Policy Studies Associates

Margaret Goertz
Independent Consultant

Meredith Bachman
Project Officer
Institute of Education Sciences

September 2015

NCEE 2015-4016
U.S. DEPARTMENT OF EDUCATION

ies NATIONAL CENTER FOR EDUCATION EVALUATION AND REGIONAL ASSISTANCE
Institute of Education Sciences

U.S. Department of Education
Arne Duncan
Secretary

Institute of Education Sciences
Ruth Neild
Deputy Director for Policy and Research
Delegated Duties of the Director

National Center for Education Evaluation and Regional Assistance
Joy Lesnick
Acting Commissioner

September 2015

This report was prepared for the Institute of Education Sciences under Contract ED-IES-10-C-0042. The project officer is Meredith Bachman in the National Center for Education Evaluation and Regional Assistance.

Disclosure of Potential Conflicts of Interest

The study team for this report consisted of a prime contractor, Westat, and a subcontractor, Policy Studies Associates. None of the authors or other staff involved in the study has financial interests that could be affected by findings from the evaluation.

Contractors carrying out research and evaluation projects for IES frequently need to obtain expert advice and technical assistance from individuals and entities whose other professional work may not be entirely independent of or separable from the particular tasks they are carrying out for the IES contractor. Contractors endeavor not to put such individuals or entities in positions in which they could bias the analysis and reporting of results, and their potential conflicts of interest are disclosed. None of the study's Technical Working Group members or expert review panel members has financial interests that could be affected by findings from the evaluation.

Acknowledgments

We very gratefully acknowledge the cooperation of the participants in this study. We appreciate the time that state and local education agency staff, and principals spent completing surveys about education reform efforts.

In addition to the authors, many others played important roles in data collection, analysis, and report preparation. At Westat, school district and school data collection was led by Juanita Lucas-McLean and Sylvia Segovia, with support from Christina Fetzko, Laura Prinslow, Luis Romero, Mervin Ruiz, and Kerri Wills. Yong Lee provided programming support for data collection and analysis. Christina Fetzko, Myriell Tyler, and Kerri Wills helped with data cleaning. Lou Rizzo led the statistical efforts, with support from Lloyd Hicks and Jane Li. Evarilla Cover and Saunders Freeland provided editorial and report production support.

At Policy Studies Associates, Bruce Haslam provided important leadership during the study design and instrument development phases. He and Beth Sinclair also led the state data collection with support from Natalie Orozco and Yvonne Woods.

The report also was informed by Technical Working Group (TWG) meetings conducted during design, planning, and analysis phases. We thank these experts for their thoughtful participation and input with regard to study design and analysis: Tom Cook, Jack Jennings, Sharon Lohr, David Lussier, Phillip Price, Rachel Tompkins, and Marilyn Troyer.

Table of Contents

Contents (continued)

Appendixes **Page**

Tables

Contents (continued)

Tables **Page**

Contents (continued)

Tables **Page**

Contents (continued)

Contents (continued)

Tables **Page**

Contents (continued)

Tables **Page**

Contents (continued)

Tables **Page**

Contents (continued)

Tables **Page**

Figures

Contents (continued)

Figures **Page**

Contents (continued)

Figures **Page**

Contents (continued)

Figures **Page**

Exhibits

Executive Summary

Introduction

The American Recovery and Reinvestment Act (ARRA or the Recovery Act) of 2009 provided an unprecedented level of funding for K-12 education. The program created a "historic opportunity to save hundreds of thousands of jobs, support states and school districts, and advance reforms and improvements that will create long-lasting results for our students and our nation."[1] Specifically, the Recovery Act allocated $70.6 billion in funding for K-12 education, of which $68.8 billion was awarded to states through a combination of newly created and existing grant programs, including the State Fiscal Stabilization Fund (SFSF) formula grants, Race to the Top (RTT) discretionary grants, and additional funding for the School Improvement Grant (SIG) program. As a way of promoting educational improvement, the Recovery Act required state recipients of ARRA funds to commit to advancing four specific education reform priorities, or "assurance areas":

- "Making progress toward rigorous college- and career-ready standards and high-quality assessments that are valid and reliable for all students, including English language learners and students with disabilities,

- Establishing pre-K to college and career data systems that track progress and foster continuous improvement,

- Making improvements in teacher effectiveness and the equitable distribution of qualified teachers for all students, particularly students who are most in need, and

- Providing intensive support and effective interventions to the lowest-performing schools."[2]

The four assurance areas were intended by the act's drafters to constitute an integrated, comprehensive vision of educational improvement that would be capable of raising the academic performance of all public school students. The vision embodied in the assurance areas begins with high expectations and accountability for student achievement (i.e., shared, rigorous standards and appropriate assessments). To support this vision, the Recovery Act's programs encouraged the development of data tools that can provide information to both help educators identify needs for improvement and provide feedback on the impact of educational changes on student learning. The act also recognizes the importance of effective educators by emphasizing improvements in their preparation, evaluation, and compensation and on achieving a more equitable distribution of effective teachers across schools within local education agencies (LEAs). Finally, to upgrade persistently low-performing schools, the act's programs provide incentives and tools for intervening in and improving these schools. By linking a commitment to the four assurance areas with receipt of funding, the Recovery Act signaled federal priorities; provided states, districts, and schools with incentives to initiate or intensify reforms in each of these areas; and encouraged states to pursue a combination of mutually supporting reform strategies.

---

[1] The *American Recovery and Reinvestment Act of 2009: Saving and Creating Jobs and Reforming Education* (March 2009). http://www2.ed.gov/policy/gen/leg/recovery/implementation.html

[2] Ibid.

This is the final report of a multi-year U.S. Department of Education (ED) evaluation *Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role*. ED sought to track the adoption of policies and the implementation of practices associated with the education reforms promoted by the Recovery Act at the state, district, and school levels. This report focuses on the status of implementation of these reforms two full school years after the award of all Recovery Act funds (2011-12). It also describes the progress in implementing these reforms since these funds were first being distributed (2009-10). The report provides a snapshot of the status of reforms at particular points in time. The study did not collect information about the reasons why states, districts, and schools adopted or implemented these policies and practices. In addition, the report does not assess the relationship between the amount of Recovery Act funds received or the receipt of funds from specific grant programs and the implementation of reform.[3] Finally, the report does not address whether state, district, or school implementation of more reforms constitutes an integrated, comprehensive reform approach.

Key Findings

The indicators of reform tracked by the study reflect ED's priorities and key reform strategies within each of the four assurance areas as identified in its grant notices, regulations, and guidance for the Recovery Act programs.[4] The indicators were designed to provide a high-level snapshot of whether SEAs, districts, or schools had a particular policy in place, provided support, or carried out a particular activity.

Among the indicators of reform that the study tracked, the prevalence and progress of reform implementation from 2009-10 to 2011-12 varied by assurance area and level (state, district, or school). At the state and school level, implementation of reforms increased in multiple assurance areas while at the district level only one assurance area showed increased activity. Across all levels, progress was seen most often in the standards and assessment reform indicators and least often for indicators of educator effectiveness and workforce development.

- At the state level, progress was made on 16 of the 18 indicators that the study tracked. The two where progress was not found both related to the capabilities of state level data systems (figures ES-1, ES-4, ES-7, ES-10). The number of state education agencies (SEAs) that reported supporting use of student achievement gains for principal evaluation went from 6 in 2009-10 to 22 in 2011-12, the largest increase found. However, in 2011-12 more SEAs were carrying out the four reforms related to standards and assessments (between 42 and 46) than were carrying out the three related to educator evaluation and compensation (between 14 and 22). The largest increase in the area of standards and assessments was in providing instructional materials or curriculum assistance, where the number of SEAs increased from 29 in 2010-11 to 42 in 2011-12.

[3] All states committed to the four assurance areas as a condition for receiving funds, and more than 90 percent of the Recovery Act funding was awarded by formula to all states. At the district level, it is difficult to accurately account for all funding (or benefits) received by districts from all Recovery Act programs. For example, the subgrant data in Recovery.gov does not systematically include subgrants of less than $25,000. Additionally, some reforms depend on, or are facilitated by, state actions (and likely funded by dollars retained at the state level). An analysis of district funding and reform implementation would miss this effect.

[4] We drew on the specific strategies and activities described in SFSF assurance indicators and descriptors, the RTT selection criteria, and guidance for the Title I-ARRA and SIG programs.

- Local-level findings for standards and assessments were in line with state-level findings. Progress was reported for three of the four district level indicators (figure ES-2) and all three of the school level indicators (figure ES-3).

    - In 2011-12, 73 percent of districts in states that adopted the Common Core State Standards (CCSS) reported providing professional development on new or revised state standards up from 59 percent in 2009-10, the largest increase found in a district level reform effort. Other areas where district reports indicate progress were increased awareness of state adoption of the CCSS and provision of standards-aligned instructional materials or curricular guidance.

    - Likewise, 78 percent of schools in CCSS states reported that teachers received standards-related professional development in 2011-12, up from 63 percent in 2009-10. In 2011-12, schools also were more likely to report that teachers received professional development targeted to helping English learners or students with disabilities master new standards or to use curriculum or materials aligned with new standards.

- Findings related to educator effectiveness varied across the three levels. For example, the percentage of districts that reported using student achievement gains to make decisions about teacher tenure, dismissal, or assignment decreased over time (24 percent in 2011-12 compared with 38 percent in 2009-10). However, there was an increase in the percentage of schools that reported using the same practices (34 percent in 2011-12 compared with 29 percent in 2009-10). Similarly, there was a small but significant decrease in the percentage of districts that reported they differentiated teacher compensation based on student achievement gains (8 percent in 2011-12 compared with 12 percent in 2009-10), while there was no significant change at the school level (10 percent in 2011-12 and 12 percent in 2009-10) (figures ES-8 and ES-9).

- In the area of improving low-performing schools, the number of SEAs providing guidance on choosing and implementing SIG school intervention models increased to include all 51 SEAs in 2011-12. However, reports from districts with low-performing schools and from low-performing schools suggest that relatively little use was made of key elements of the SIG closure, restart, and turnaround models. For example, in 2011-12, 2 percent of districts with low-performing schools targeted these schools for closure, and 11 percent of low-performing schools reported that they replaced a substantial portion of teachers as part of school restructuring (figures ES-11 and ES-12).

- As expected, states that received RTT awards were more likely than other states to implement reforms across the assurance areas in 2011-12. In keeping with expectations, large districts were significantly more likely than small and medium size districts to implement reforms across the assurance areas. [5] However, in contrast to expectations, generally no significant differences were found between high-poverty and other districts in the implementation of reforms. Low-performing schools were significantly less likely than other schools to report implementing two of the three reforms examined related to standards and assessments, but were significantly more likely than other schools to report using longitudinal data to track student achievement gains and use these gains to evaluate principals and to differentiate teacher compensation.

[5] As a reminder, the district-level analysis of reforms to support improvement in low-performing schools was limited to districts with low-performing schools. We did not analyze the data for districts with low-performing schools by district size and district poverty status.

- The most frequently reported major challenges in 2011-12 were in the area of educator workforce development (table ES-1). Among SEAs, 76 percent (35 of 46 rating the challenge) reported difficulty measuring student growth for teachers of subjects with no standardized tests as a major challenge. Large percentages of districts and schools rated insufficient funding to provide performance-based compensation or differentiated compensation as major challenges.

Study Questions and Methods

This study was designed to capture the implementation of the reform agenda promoted by the Recovery Act for each of three school years. Activity during the 2009-10 school year provided a baseline for the study, capturing the reforms already in place when Recovery Act funding was first being distributed. The study also examines progress of reform as measured by the total number of SEAs or percentage of districts and schools implementing reforms from one year to the next. Though states (and their SEAs) are the primary focus of the four assurance areas and the primary conduits for the act's financial assistance, understanding the progress of the reforms promoted by the act, also requires examining reform activity at the district and school levels. This is important because (1) states differ in the degree to which state policy determines district and school action, (2) state policy regulates or enables activities or programs for which districts or schools are responsible, and (3) a few of the act's component programs bypassed the state level to provide funds directly to districts promising to undertake specific reforms that were related to the assurance areas. It should be noted that while this report describes state-, district-, and school-level reform implementation it does not attempt to attribute change—or lack of change—to the Recovery Act's requirements or incentives.

Study Questions

Specifically, this report addresses the following questions:

- To what extent did SEAs, districts, and schools report implementing key reform strategies promoted by the Recovery Act in the 2011-12 school year?

- How much of the 2011-12 school year implementation reflects progress since the Recovery Act?

- Did the extent of reform in the 2011-12 school year vary by relevant state, district, and school characteristics?

- What were the greatest reform implementation challenges for SEAs, districts, and schools in the 2011-12 school year?

Data Sources

The findings in this report were drawn primarily from surveys administered to all 50 SEAs and the District of Columbia (DC) and nationally representative samples of school districts and schools during spring 2011 and spring 2012. The spring 2011 surveys asked about SEA, district, and school activities in

the 2009-10 and 2010-11 school years. The spring 2012 surveys asked about SEA, district, and school activities in the 2011-12 school year.[6]

The study's findings also drew on two existing sources of data for state-level reform activity The National Alliance of Public Charter School's annual review of state charter school laws provided information on removing or reducing limits on charter schools. States' annual performance data for the SFSF program provided information about state education data systems.

Indicators of Reform

To address the study questions, we developed indicators of reform implementation at the state (18 indicators), district (21), and school (22) levels. These indicators, presented in the figures in the findings section below, reflect ED's priorities and key reform strategies within each of the four assurance areas as identified in its grant notices, regulations, and guidance for the Recovery Act programs.[7] The indicators were designed to provide a high-level snapshot of whether SEAs, districts, or schools had a particular policy in place, provided support, or carried out a particular activity. In general, the SEA indicators focus on state adoption of specific education policies and the states' role in supporting implementation of these reforms. The district indicators capture information about district adoption of specific education policies and the use of strategies to support and promote reform policies at the school level. The school indicators focus on whether specific practices or strategies associated with implementing state or district policies or programs related to the assurance areas were being used in schools.

Because of the variety of potential SEA and district responses to Recovery Act reform requirements and because assurance areas could be met by using different approaches, the indicators often captured several ways in which a state, district, or school might implement a reform. Where appropriate, the indicators include multiple strategies, but do not assume that one approach is preferable to another. For these indicators, an SEA, district, or school was said to have met an indicator if it reported implementing any one of a particular set of related strategies. Some Recovery Act programs, however, have more prescriptive requirements. In these cases, states and districts had to take specified actions, such as adoption of the Common Core State Standards (CCSS) or the inclusion of student growth measures in educator evaluation systems, to meet an indicator. For these indicators, an SEA or district met the indicator only if a specific set of requirements were met.

The full report provides the context and rationale for each indicator, and the appendices include a detailed description of components, decision rules, and specific Recovery Act requirements embodied in each indicator. Several factors affect interpretation of indicator results. First, the survey asked SEAs, districts, and schools to self-report on their reform activity. Some respondents may have over- or under-stated their status in implementing reforms promoted by the act. Second, the surveys relied on closed-ended questions to ask about particular reform policies, programs, strategies, and practices. It is possible that SEAs, districts, and schools may have been working on a reform in a way not captured by

[6] None of the surveys asked about reforms prior to 2009-10 and did not ask how long any particular reform had been underway.

[7] We drew on the specific strategies and activities described in SFSF assurance indicators and descriptors, the RTT selection criteria, and guidance for the Title I-ARRA and SIG programs.

our survey questions. Third, the indicators represent a high-level snapshot of SEA, district, and school response to Recovery Act reform priorities and do not measure the intensity or quality of reform efforts.

Challenges

In addition to measuring the extent of reform activity, the study examined challenges that SEAs, districts, and schools reported when implementing reforms in 2011-12. The surveys asked states, districts, and schools that were implementing any reforms in an assurance area whether they encountered particular challenges and whether each challenge was a major or minor one.

Findings

The findings below are organized by reform assurance area: standards and assessment, data systems, educator workforce development, and improving low-performing schools. Within each assurance area, we discuss the status of SEAs, districts, and schools on the Recovery Act reform agenda in 2011-12 and change since 2009-10 to get a measure of new activity or progress over time.[8] When discussing the results for progress over time at the district and school levels, we focus on findings where statistically significant increases or decreases were found. We conclude by presenting a summary of the top major challenges when working to implement reforms in each assurance area reported by SEAs, districts, and schools in 2011-12.

The full report includes findings for the status of reform implementation in 2011-12 by several SEA, district, and school characteristics to determine if certain types of entities were more likely to report implementing reforms than others. At the state level, we examined reform implementation by whether the state received a first or second round RTT award. At the district level, we examined reform implementation by district poverty status and district size. For three of the four assurance areas, we also examined differences in reform implementation between schools identified as low performing and schools not so identified. The full report also identifies additional challenges (beyond those in the Executive Summary) that were reported as major in 2011-12, but were not among the top-rated major challenges. The final chapter of the report provides an overview of state, district, and school reform implementation across the four assurance areas.

Standards and Assessments

The Recovery Act cited the state-level adoption and implementation of rigorous college- and career-ready standards and aligned high-quality assessments as pivotal steps in accelerating educational improvement throughout the United States. As a condition for receipt of SFSF funds, the Recovery Act held states accountable for improving state academic standards and enhancing the quality of academic assessments. The final SFSF rules encouraged "states to work together to develop and implement common, internationally benchmarked standards and assessments aligned to those standards, in order

[8] Note that some reform activities measured in the SEA indicators have the potential to continue over multiple years once they are instituted. For example, when a state issues standards or guidelines for teacher preparation programs, these are likely to remain in effect until new or revised standards or guidelines are issued. So, this one time action of issuing standards can represent a support for a reform effort that is ongoing or continued in future years. In measuring SEA reform activity for selected indicators, if a state reported activity in a previous year, the SEA is counted as meeting the indicator in subsequent years.

to ensure that students are college- and career-ready." While the act did not explicitly endorse the CCSS, new policies established incentives for states to adopt the CCSS in reading/English language arts and mathematics. Adoption of common standards also was intended to facilitate states working together to develop common assessments and to update those standards as needed over time, saving states time and money and reducing redundancy and inconsistencies across states. Under the act, ED funded two multi-state consortia, the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC), to develop the next generation of K-12 assessments for the general student population.

The Investing in Innovation (i3) and RTT programs provided incentives for school districts and others to support the transition to the new standards and aligned assessments. One of the priority areas for the i3 grants was to fund innovations that complement the implementation of high standards and quality assessments. As part of the RTT grant selection criteria, participating districts were to collaborate with their SEAs to develop a high-quality plan to support the transition to college- and career-ready standards and aligned assessments. Figures ES-1 through ES-3 below summarize state, district, and school findings for the study's reform indicators for standards and assessments. Note that figures ES-2 and ES-3 are limited to districts and schools in states that adopted the CCSS in mathematics and reading/English language arts.

Implementation and Progress from 2010-11 to 2011-12

State adoption of the CCSS and membership in a federally funded consortium developing aligned assessments increased between 2010-11 and 2011-12. Although most states had already adopted the CCSS by 2010-11, the number of SEAs reporting that they adopted the CCSS in mathematics and reading/English language arts increased from 43 to 46 SEAs in 2011-12 (figure ES-1).[9] In addition, the number of SEAs reporting that they were members of a federally funded consortium developing assessments aligned to the CCSS increased from 43 to 44 SEAs. District awareness of their state's CCSS adoption increased significantly with 86 percent of districts reporting awareness in 2010-11 and 98 percent in 2011-12 (figure ES-2).

The largest increases for this reform area were seen in district and school implementation of professional development related to the new or revised standards (figures ES-1, ES-2, and ES-3). The number of SEAs reporting that they provided, guided, or funded professional development on the CCSS increased from 37 to 45, while the percentage of districts in CCSS states that reported providing professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts increased from 59 percent to 73 percent. The percentage of schools in CCSS states reporting teachers received professional development on new or revised state content standards increased from 63 percent to 78 percent.

In addition, the number of SEAs reporting that they provided instructional materials or curriculum assistance for the CCSS increased from 29 to 42, while the percentage of districts reporting distributing instructional materials or providing guidance on curricula aligned with new or revised state content standards increased from 53 percent to 63 percent, and the percentage of schools reporting use of aligned materials increased from 60 to 66 percent.

[9] No data are reported for 2009-10 because the CCSS were not yet available.

While the percentage of schools in CCSS states reporting that their teachers received professional development targeted to help English learners or students with disabilities master new or revised state content standards increased from 62 to 68 percent, the 58 percent of districts reporting providing such professional development in 2011-12 did not represent a significant increase over time.

Figure ES-1. Number of state education agencies (SEAs) that implemented standards and assessments reforms: 2010-11 and 2011-12

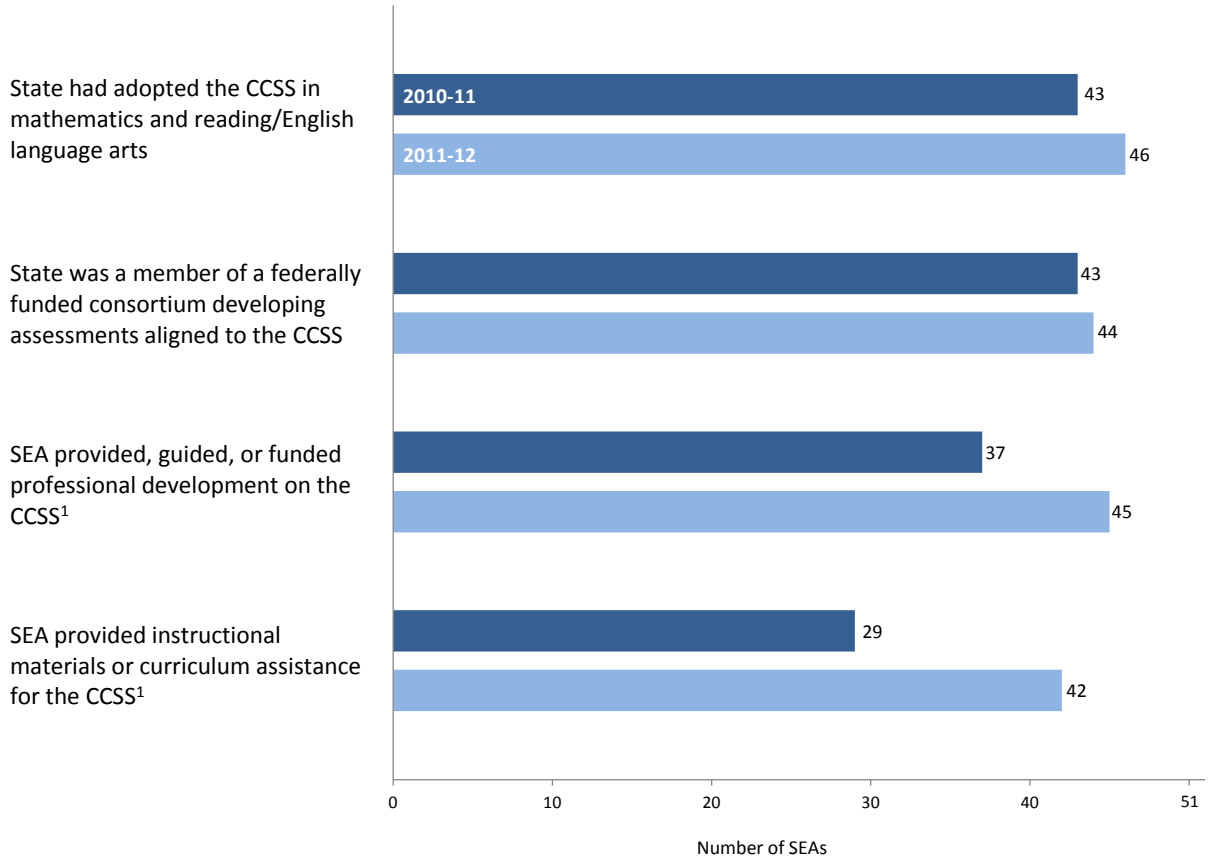


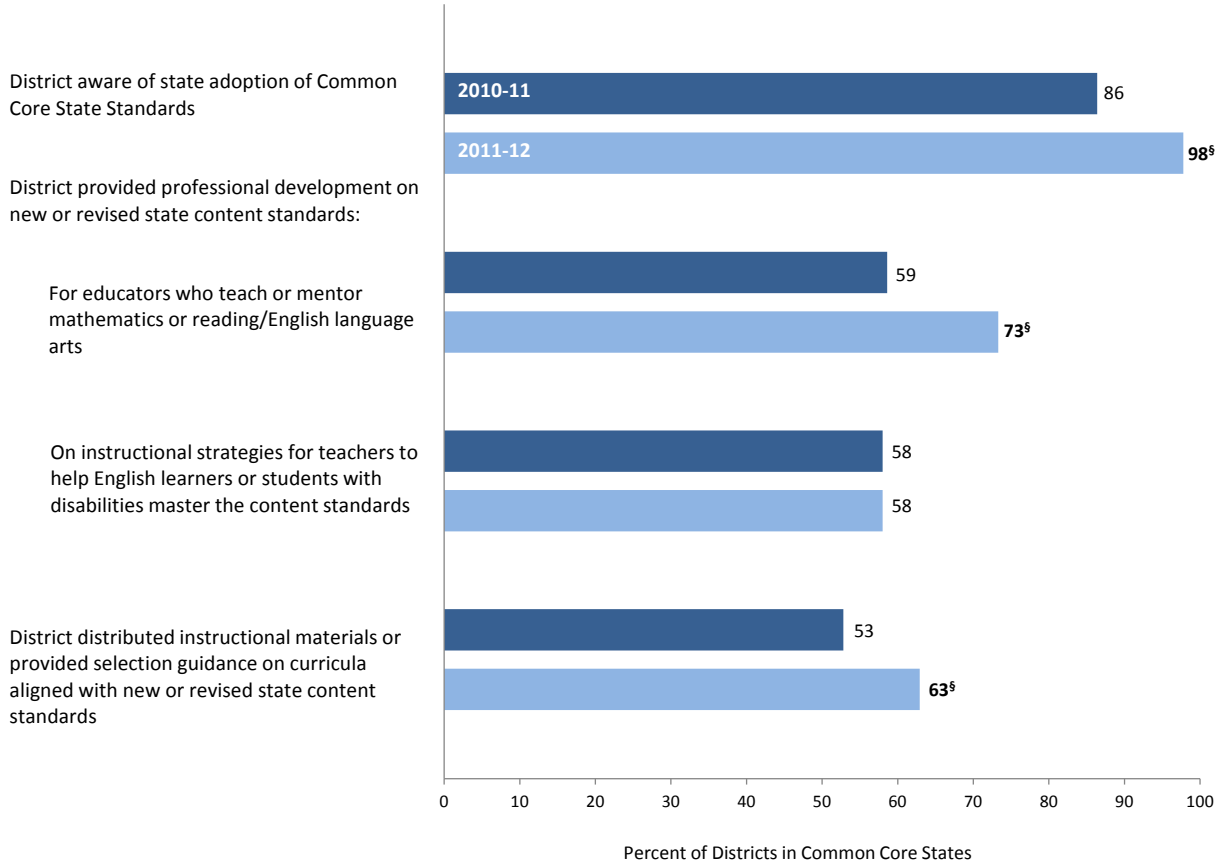
Figure Reads: Forty-three SEAs reported that in 2010-11 they had adopted Common Core State Standards (CCSS) for both mathematics and reading/English language arts. Forty-six SEAs did so by 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in 2010-11, the SEA is counted as meeting the indicator in 2011-12.

Notes: Respondents include 50 states and DC. No data are reported for 2009-10 because the CCSS were not yet available.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys.

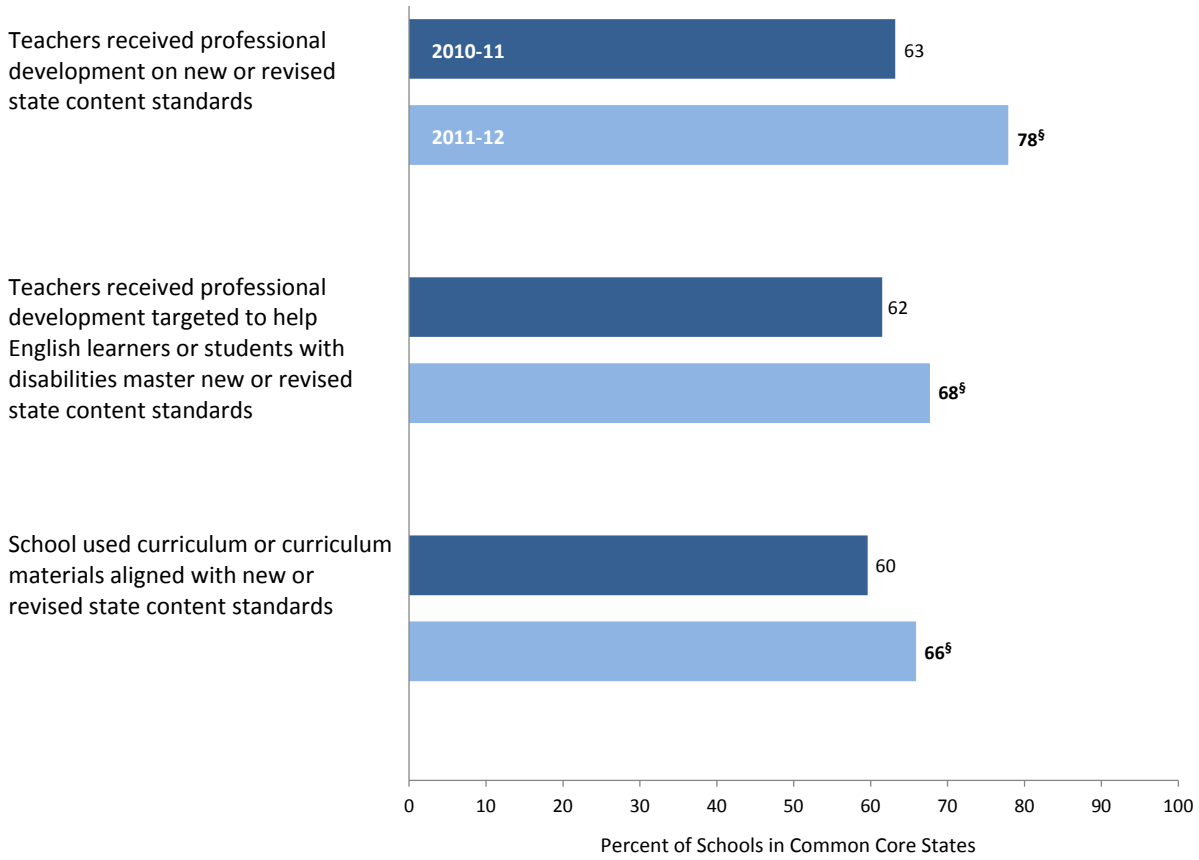
Figure ES-2. Percentage of districts in Common Core State Standards (CCSS) states that implemented reforms related to new or revised state standards: 2010-11 and 2011-12



§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).

Figure Reads: Eighty-six percent of districts in Common Core State Standards (CCSS) states reported that in 2010-11 they were aware that their state had adopted these standards. In 2011-12, 98 percent of districts in CCSS states were aware that their state had adopted these standards.
Note: No data are reported for 2009-10 because the CCSS were not yet available.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Figure ES-3. Percentage of schools in Common Core State Standards (CCSS) states that implemented new or revised state standards: 2010-11 and 2011-12



§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).

Figure Reads: Sixty-three percent of schools in Common Core State Standards (CCSS) states reported that in 2010-11 their teachers received professional development on new or revised state content standards. In 2011-12, 78 percent of schools in CCSS states reported that their teachers received such professional development.
Note: No data are reported for 2009-10 because the CCSS were not yet available.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Data Systems

Many of the Recovery Act's programs provided incentives to ensure that teachers, schools, districts, SEAs, and other stakeholders have information about individual student outcomes, from early childhood through higher education and workforce entry, to drive educational improvement. The Recovery Act programs emphasized the importance of comprehensive statewide longitudinal data systems. Through the assurance areas, the act specified that as a condition for receiving funds, states will establish systems that include the 12 core system components described in the 2007 America COMPETES Act (Public Law 110-69).[10] Through an infusion of an unprecedented $250 million into the Statewide Longitudinal Data Systems (SLDS) grant program, the act also provided funds to build and improve such systems.[11] For RTT, each state had to demonstrate the extent to which its statewide longitudinal system included all 12 components. The Recovery Act also funneled an additional $200 million to the Teacher Incentive Fund (TIF) program. A core element for TIF-funded performance-based compensation systems is a data system that can link student achievement data to teacher and principal payroll and human resources systems.

In addition to building comprehensive data systems, the Recovery Act programs encouraged states to promote data access and use, and included incentives for districts and schools to use the data. States applying for RTT were required to demonstrate how they would make statewide longitudinal data accessible to key stakeholders, and how the state would support districts in using data to improve instruction. In addition, to receive a share of the $3 billion additional funds for SIG the act made available, districts had to commit to implementing specific intervention models in their lowest performing schools. Use of student data to inform and differentiate instruction are part of two of the four SIG school intervention models, and encouraging evaluation of educators based on student growth is part of a third SIG model. Figures ES-4 through ES-6 below summarize state, district, and school findings for the study's reform indicators for data systems.

Implementation and Progress from 2009-10 to 2011-12

Thirteen SEAs reported operating a longitudinal data system that included all 12 core components by 2010-11, unchanged from 2009-10 (data from 2011-12 were not available). While more SEAs facilitated access to assessment data and provided professional development or technical assistance on their use in 2011-12 than 2009-10, there was no corresponding district trend (figures ES-4 and ES-5). The number of SEAs reporting that they facilitated access to assessment data and provided professional development or technical assistance to support educators' use of assessment data increased from 35 to 45 and 32 to 47, respectively, from 2009-10 to 2011-12. However, there was no statistically significant increase in the percentage of districts reporting that they provided educators with access to assessment data and professional development on the use of assessment data for instructional planning. Though, in 2011-12 89 percent and 80 percent of districts reported doing so. For

[10] The 12 components include: use of unique student identifiers; student-level enrollment, demographic, and program participation information; exit drop out, transfer, and completion information for P-16 programs; communication with higher education data systems; assessing data quality, validity, and reliability; yearly test records; information on students not tested; teacher identification systems that allow linking to students; student-level transcript information; college readiness test scores; information on students' transition from high school to postsecondary institutions; and other information to determine alignment and preparedness for success in postsecondary education.

[11] Prior to the Recovery Act, the SLDS grant program (through three grant competitions) funded 41 states and the District of Columbia to design, develop, and implement statewide longitudinal data systems.

only one reform at the district level (used longitudinal data to track student achievement gains for individual teachers) was there a significant increase from 2009-10 to 2011-12 in the percentage of districts implementing (from 60 to 66 percent).

However, there was a statistically significant increase in the percentage of schools using student data to support instruction from 2009-10 to 2011-12 for all reform indicators (figure ES-6). The percentage of schools reporting that teachers had online access to student assessment results increased from 85 to 92 percent, the percentage of schools reporting that they used student assessment data to tailor instruction increased from 85 to 95 percent, and the percentage reporting that they used assessment data to identify students for additional support increased from 93 to 98 percent. In addition, a higher percentage of schools reported that they used longitudinal data to track student achievement gains for individual teachers, increasing from 60 percent in 2009-10 to 71 percent in 2011-12).

Figure ES-4. Number of state education agencies (SEAs) that implemented data system reforms: 2009-10, 2010-11, and 2011-12

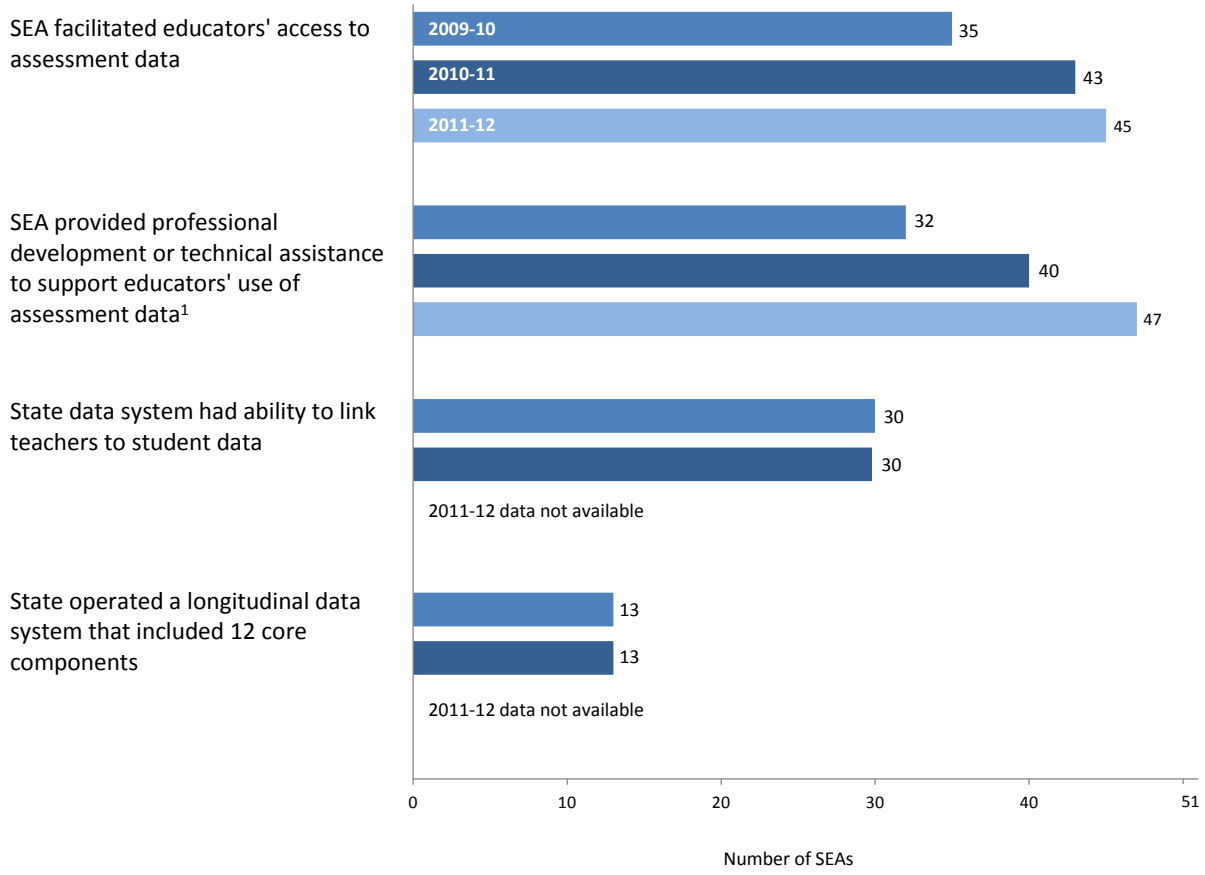


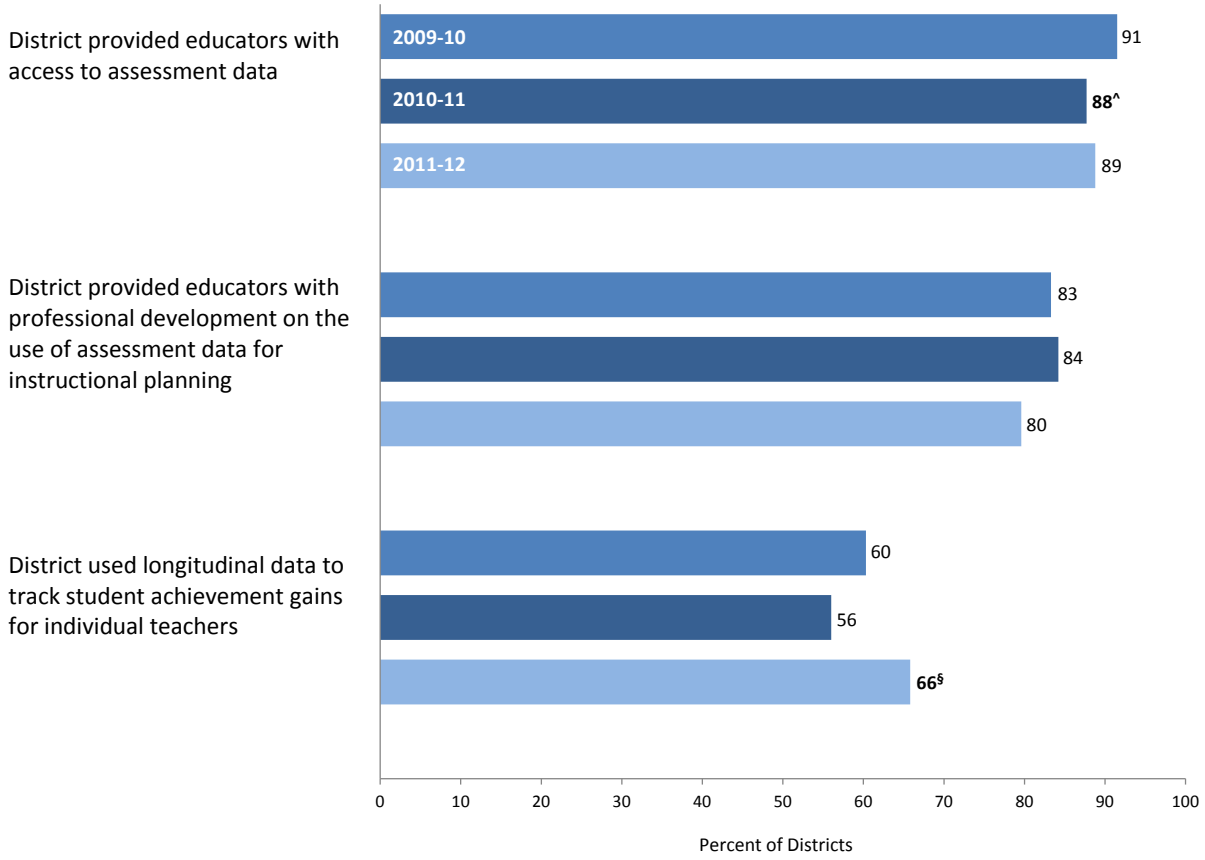
Figure Reads: Thirty-five SEAs reported that in 2009-10 they facilitated educators' access to assessment data. Forty-three SEAs did so in 2010-11, and 45 did so in 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years.

Note: Respondents include 50 states and DC.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys and U.S. Department of Education, State Fiscal Stabilization Fund Initial Annual State Reports (2009-10) and Amended Applications (2010-11). States' status on the core components for 2011-12 was not available from the U.S. Department of Education.

Figure ES-5. Percentage of districts that supported reforms related to educators' use of student data: 2009-10, 2010-11, and 2011-12



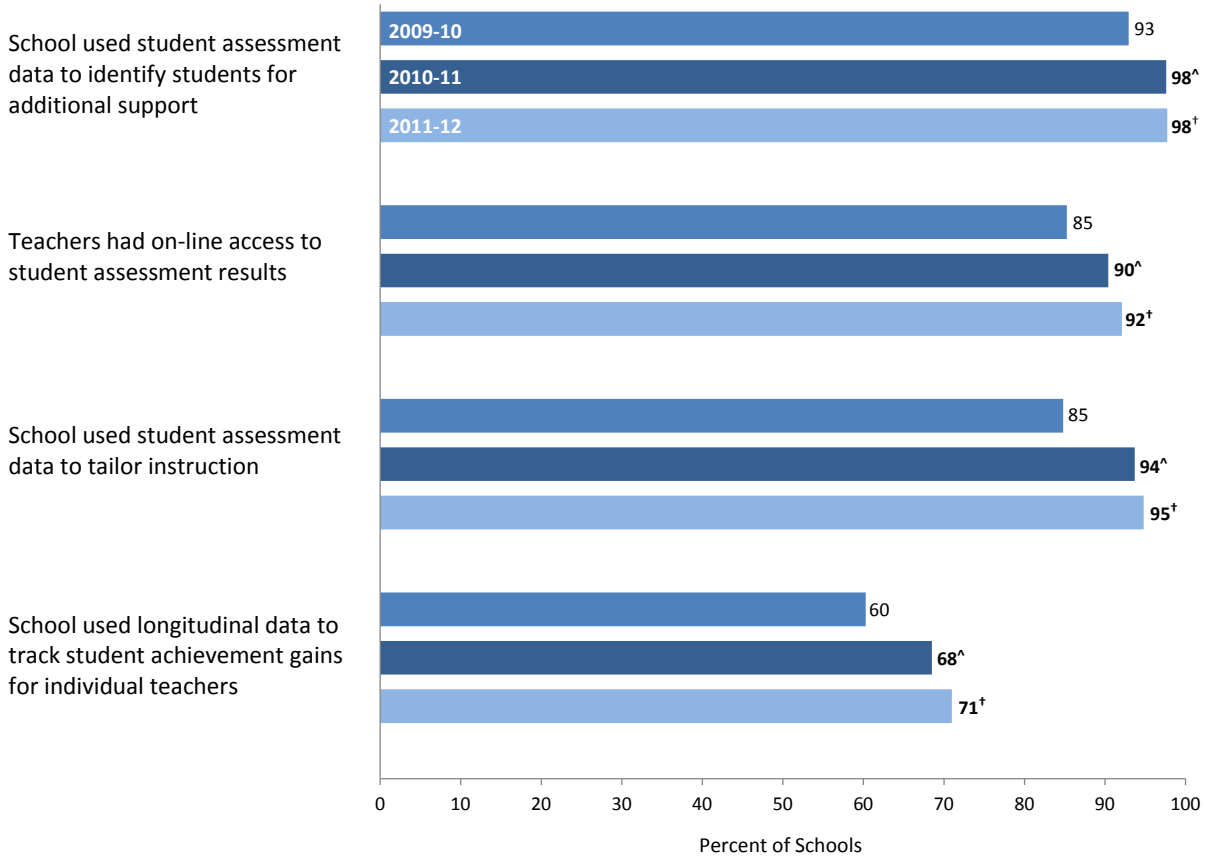
^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).

Figure Reads: Ninety-one percent of districts reported that they provided educators with access to assessment data in 2009-10. In 2010-11, 88 percent of districts reported that they provided educators with access to assessment data, and 89 percent of districts did so in 2011-12.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Figure ES-6. Percentage of schools that used student data to support instruction: 2009-10, 2010-11, and 2011-12



^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).

† Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).

Figure Reads: Ninety-three percent of schools reported that they used student assessment data in 2009-10 to identify students for additional support. In 2010-11, 98 percent of schools reported using student assessment data for that purpose, and 98 percent did so in 2011-12.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Educator Workforce Development

The Recovery Act provided substantial incentives for states and districts to work to increase teacher effectiveness and the equitable distribution of effective teachers. The act's component programs emphasized efforts to develop a more effective educator workforce through the preparation of new educators and the adoption of educator evaluation and compensation policies to promote the recruitment, retention, and equitable distribution of those educators who were determined to be effective. As part of these reforms, the Recovery Act promoted, and under some grant programs required, that the effectiveness of teachers and principals be, at least partially, demonstrated through growth in their students' achievement.

The Recovery Act provided incentives for broader implementation of these strategies across the country and at the state, district, and school levels. The priorities, reporting requirements, and incentives contained in the act's various grant programs encouraged state leadership on educator workforce efforts, both in areas where SEAs historically had played a strong role (e.g., teacher licensure and certification) and in areas where SEAs had been less involved (e.g., teacher evaluation and pay). In particular, both the RTT selection priorities and the SFSF requirements to report on the use of student growth as an evaluation criterion and on the distribution of educator performance ratings within districts encouraged states to pay more attention to rigorous educator evaluation. The additional funding for the TIF and SIG programs through the act also extended incentives for evaluation and compensation reform directly to districts and schools and independently from states. TIF required both compensation differentiation based on student achievement gains and evaluation based substantially on such gains. SIG identified compensation differentiation based on student growth as a permissible strategy and required evaluation that included consideration of growth as part of the transformation model. Figures ES-7 through ES-9 below summarize state, district, and school findings for the study's reform indicators for educator workforce development.

Implementation and Progress from 2009-10 to 2011-12

Reforms related to educator preparation were the most common type of state level reform implemented in 2011-12 and the number of states supporting these reforms increased from 2009-10 to 2011-12 (figure ES-7).[12] Six more SEAs reported that they simplified or shortened educator licensure processes or authorized non-university preparation programs (increased from 33 to 39 SEAs).[13] Ten more SEAs reported that they issued standards or guidelines for teacher preparation programs (increased from 28 to 38 SEAs). Fifteen more SEAs reported that they issued standards or guidelines for principal preparation programs (increased from 20 to 35 SEAs). Fewer SEAs reported supporting reforms related to educator evaluation and compensation but there were still increases in the number of SEAs implementing these reforms over time. Eight more SEAs reported differentiating teacher compensation based on student achievement gains. Sixteen more SEAs reported that they supported the use of student achievement gains for principal evaluation (increased from 6 in 2009-10 to 22 in 2011-12), making this the largest increase in implementation found among all state level reform efforts. Thirteen more SEAs reported supporting the use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation (an increase from 1 in 2009-10 to 14 in 2011-12).

[12] Because these indicators measure state activities that require a one-time action and may remain in effect across years, SEAs that reported reforms in either of the previous years were considered as continuing the activity in 2011-12.

[13] See Appendix table E.1 for the number of SEAs that implemented each of these reforms.

At the district level (figure ES-8), the most frequently reported reform in 2011-12 was providing school leaders with professional development or flexibility to hire effective teachers; however, providing this professional development or flexibility decreased from 69 percent of districts in 2009-10 to 63 percent in 2011-12 (figure ES-8).[14] Reforms in teacher compensation, teacher and principal evaluation, and use of student achievement gains were less commonly reported in 2011-12 (8 to 30 percent). And from 2009-10 to 2011-12 there was a decrease in district use of student achievement gains for teacher tenure, dismissal, or assignment decisions (from 38 percent to 24 percent).

Among the educator compensation and evaluation practices that schools were asked about (figure ES-9), principal evaluation that included student achievement gains was the most often reported reform in 2011-12 (by 49 percent of schools). Thirty-four percent of schools reported that teacher tenure, dismissal, or reassignment decisions used student achievement gains in 2011-12, a significant increase from the 29 percent that reported doing so in 2009-10. Eighteen percent of the schools reported that teacher evaluation practices included multi-level rubrics, multiple observations, and student achievement gains in 2011-12. Ten percent of schools reported that teacher compensation was differentiated based on student achievement gains in 2011-12. Schools were not asked about reform efforts typically under the purview of states and districts, including reforms related to educator preparation and flexibility in hiring.

[14] See Appendix table E.5 for the percentage of districts that implemented each of these reforms.

Figure ES-7. Number of state education agencies (SEAs) that implemented educator workforce development reforms: 2009-10, 2010-11, and 2011-12

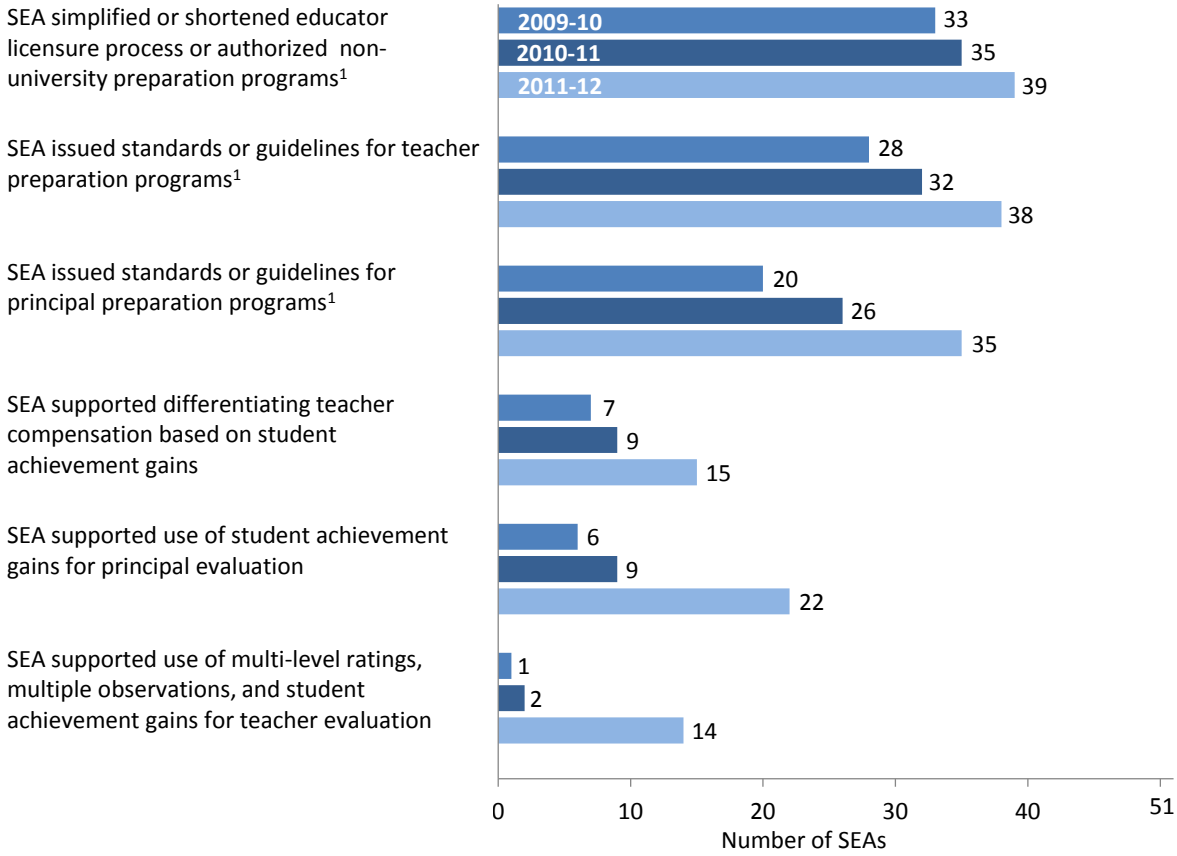


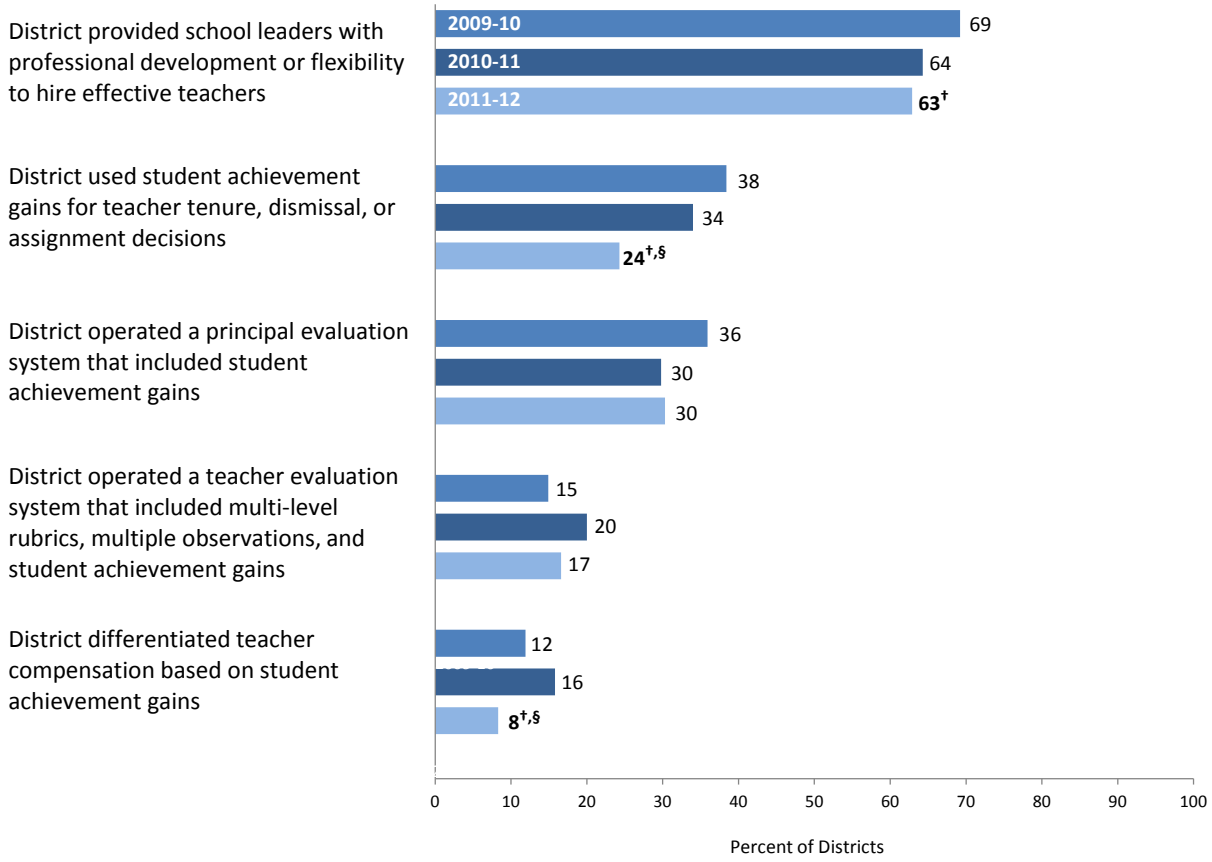
Figure Reads: Thirty-three SEAs reported that in 2009-10, they simplified or shortened the educator licensure process or authorized non-university educator preparation programs. Thirty-five SEAs did so by 2010-11 and 39 in 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years.

Notes: Respondents include 50 states and DC.

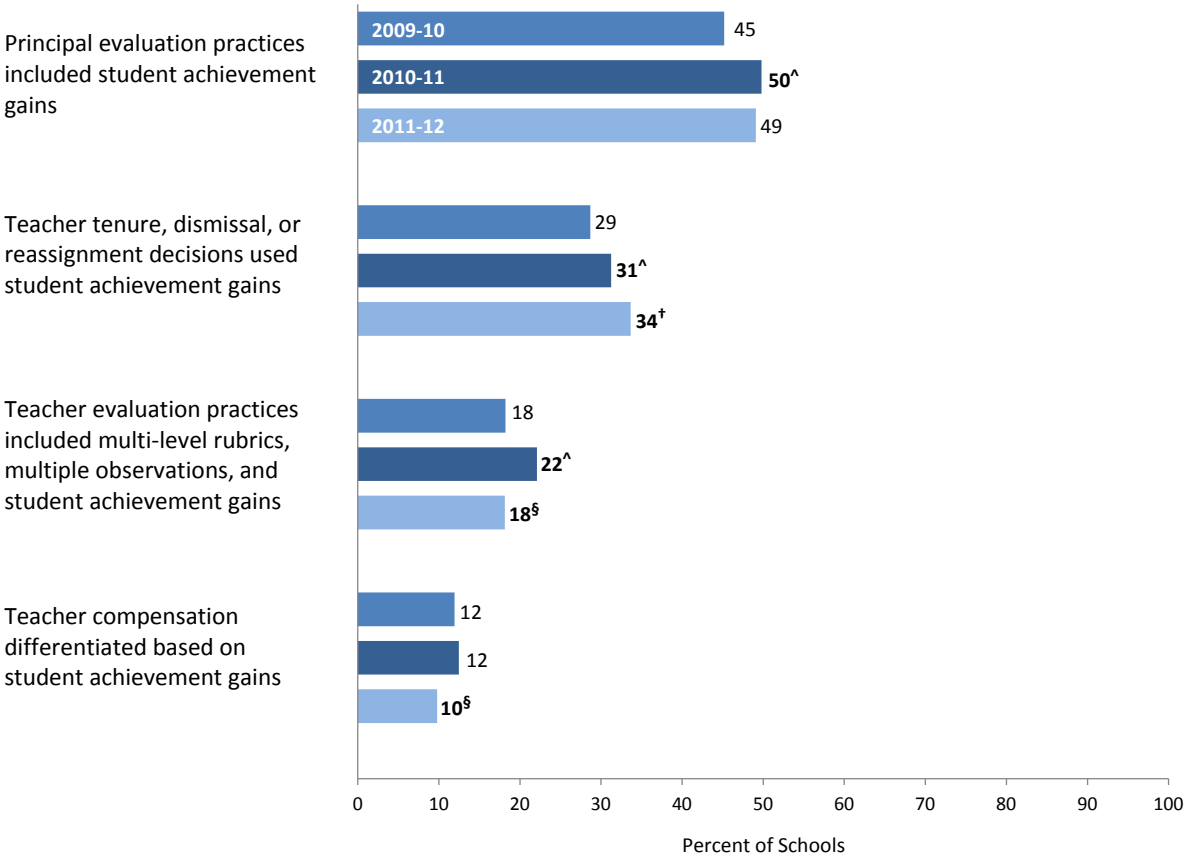
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys.

Figure ES-8. Percentage of districts that implemented reforms related to educator workforce development: 2009-10, 2010-11, and 2011-12



†Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).
§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).
Figure Reads: Sixty-nine percent of districts reported that in 2009-10 they provided school leaders with professional development or flexibility to hire effective teachers. In 2010-11, 64 percent of districts provided school leaders with professional development or flexibility to hire effective teachers, and 63 percent of districts did so in 2011-12.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Figure ES-9. Percentage of schools that used student achievement gains for educator evaluation, compensation, and personnel decisions: 2009-10, 2010-11, and 2011-12



^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).
† Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).
§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).
Figure Reads: Forty-five percent of schools used principal evaluation practices in 2009-10 that included student achievement gains. In 2010-11, 50 percent of schools used such evaluation practices, and in 2011-12, 49 percent of schools did so.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Improving Low-Performing Schools

Almost all of the education programs the Recovery Act funded included a focus on improving low-performing schools. These programs offered a multi-pronged approach to improvement that included identifying and providing resources to these schools and increasing the quality of their teachers and leaders.

The Recovery Act continued the federal policy of identifying and providing resources to low-performing schools,[15] but also brought attention, substantial resources, and intensive reform requirements to the persistently lowest-achieving (PLA) schools. These are the state's lowest-achieving 5 percent of schools and secondary schools with chronically low graduation rates.[16] The act provided an additional $3 billion for the SIG program. This large infusion of funds came with new program requirements. In general, SEAs are required to (1) identify PLA schools, (2) competitively award SIG funds to districts that commit to implementing specific intervention models, and (3) provide technical assistance to districts and participating schools. The required intervention models—the transformation, restart, closure, and turnaround models—focus on significant changes to a school such as leadership and staff changes, closure, or increased student learning time. Districts have the critical role of implementing the models and monitoring the progress of each SIG school. The SFSF and RTT programs also emphasized the focus on PLA schools, with roles for states to report on PLA schools or support the districts that are implementing the school intervention models.

The Recovery Act programs encouraged the equitable distribution of effective teachers and principals in schools. The RTT selection criteria considered state and district plans to ensure that students in high-need schools are taught by effective educators. SFSF required SEAs to report on the distribution of effective teachers. The act also increased funding for TIF, which enabled an increase in the number of grants for districts to develop compensation systems that could entice highly effective educators to serve in low-performing schools.

The Recovery Act also promoted a more favorable environment for public charter schools, potentially increasing the pool of these schools available for public school choice. Through the SFSF and RTT programs, states were encouraged to remove prohibitions on the existence of these schools and limitations to their numbers and to promote accountability for these schools. Figures ES-10 through ES-12 below summarize state, district, and school findings for the study's reform indicators for

---

[15] For example, the act provided $10 billion for Title I, Part A allowing the program to serve more students and improve the quality of services provided by implementing evidenced-based strategies to build capacity for improving teaching and learning in Title I schools (U.S. Department of Education, 2010c).

[16] Persistently lowest-achieving schools means, as determined by the State: (a) Any Title I school in improvement, corrective action, or restructuring that —(i) Is among the lowest-achieving five percent of Title I schools in improvement, corrective action, or restructuring or the lowest-achieving five Title I schools in improvement, corrective action, or restructuring in the State, whichever number of schools is greater; or (ii) Is a high school that has had a graduation rate that is less than 60 percent over a number of years; and (b) Any secondary school that is eligible for, but does not receive, Title I funds that —(i) Is among the lowest-achieving five percent of secondary schools or the lowest-achieving five secondary schools in the State that are eligible for, but do not receive, Title I funds, whichever number of schools is greater; or (ii) Is a high school that has had a graduation rate that is less than 60 percent over a number of years. (U.S. Department of Education, November 2010, Guidance on FY2010 School Improvement Grants, p. 1. downloaded from: http://www2.ed.gov/programs/sif/sigguidance11012010.pdf).

improving low-performing schools. Note that figure ES-11 is limited to districts with low-performing schools for 2011-12, [17] and figure ES-12 is limited to low-performing schools. [18]

Implementation and Progress from 2009-10 to 2011-12

The number of SEAs providing guidance on choosing and implementing school intervention models increased during the period from 42 SEAs to include all 51 SEAs by 2011-12. However, reports from low-performing schools and their districts suggest that relatively little use was made of key elements of the SIG closure, restart, and turnaround models (figures ES-10, ES-11, and ES-12). The percentage of districts with low-performing schools reporting targeting low-performing schools for closure was 2 percent for 2011-12; the percentage contracting with external organizations to operate low-performing schools (expected under the SIG restart model) was 3 percent; and the percentage replacing the principal and teachers (expected under the SIG turnaround model) was 5 percent. At the school level, the percentage of low-performing schools reporting that a substantial number of teachers were replaced was 11 percent and had not increased significantly between 2009-10 and 2011-12, as would be expected if more use was being made of the turnaround model. In addition, there was no significant change in the percentage of low-performing schools that reported that effective teachers were reassigned to the school as part of school restructuring (5 percent in 2011-12).

The implementation of compensation incentives to improve staffing at low-performing schools remained relatively low at the state, district, and school levels during the study period. Between 2009-10 and 2011-12, the number of SEAs reporting supporting compensation incentives to improve staffing at low-performing schools increased from 8 to 14. Sixteen percent of districts with low-performing schools reported in 2011-12 that they provided compensation incentives to improve staffing in low-performing schools. Five percent of the low-performing schools reported the use of compensation incentives for teachers who move to teach at the school, and there was no increase in this percentage between 2009-10 and 2011-12.

There was an increase in other SEA-level reforms to support improvement in low-performing schools between 2009-10 and 2011-12, particularly regarding the expansion of the number of charter schools. The number of SEAs that allowed for this expansion increased from 19 to 33 SEAs. The number of SEAs that monitored the deployment of effective educators in low-performing schools increased from 7 to 12 SEAs.

[17] The analysis of districts with low-performing schools was limited to the 2011-12 school year for two reasons. First, districts did not report whether they had low-performing schools in 2009-10. Second, the size of the confidence intervals for analyses of 2010-11 data raised questions about the accuracy of the estimates.

[18] For this report, low-performing schools include: (1) any ESEA Title I-eligible school designated for improvement, corrective action, or restructuring and (2) any high school, regardless of Title I funding or status, with a cohort graduation rate (i.e., percent of ninth graders who graduate within 4 or 5 years) less than 60 percent over the last several years.

There was also an increase in several of the school-level reforms assessed. The percentage of low-performing schools that reported implementing programs to encourage family and community involvement increased from 88 to 98 percent, the percentage that reported implementing programs to address students' social and emotional needs increased from 81 to 91 percent, and the percent that reported implementing programs to orient parents to school improvement models increased from 69 to 79 percent (figure ES-12). Reforms relating to scheduling and organization were reported by significantly greater percentages of low-performing schools in 2011-12 than in 2009-10 (figure ES-13). For example, the percentage of low-performing schools that reported modifying the daily schedule to increase instructional time for reading/English language arts or mathematics increased from 58 percent to 78 percent.

Figure ES-10. Number of state education agencies (SEAs) that implemented reforms to support improvement in low-performing schools: 2009-10, 2010-11, and 2011-12

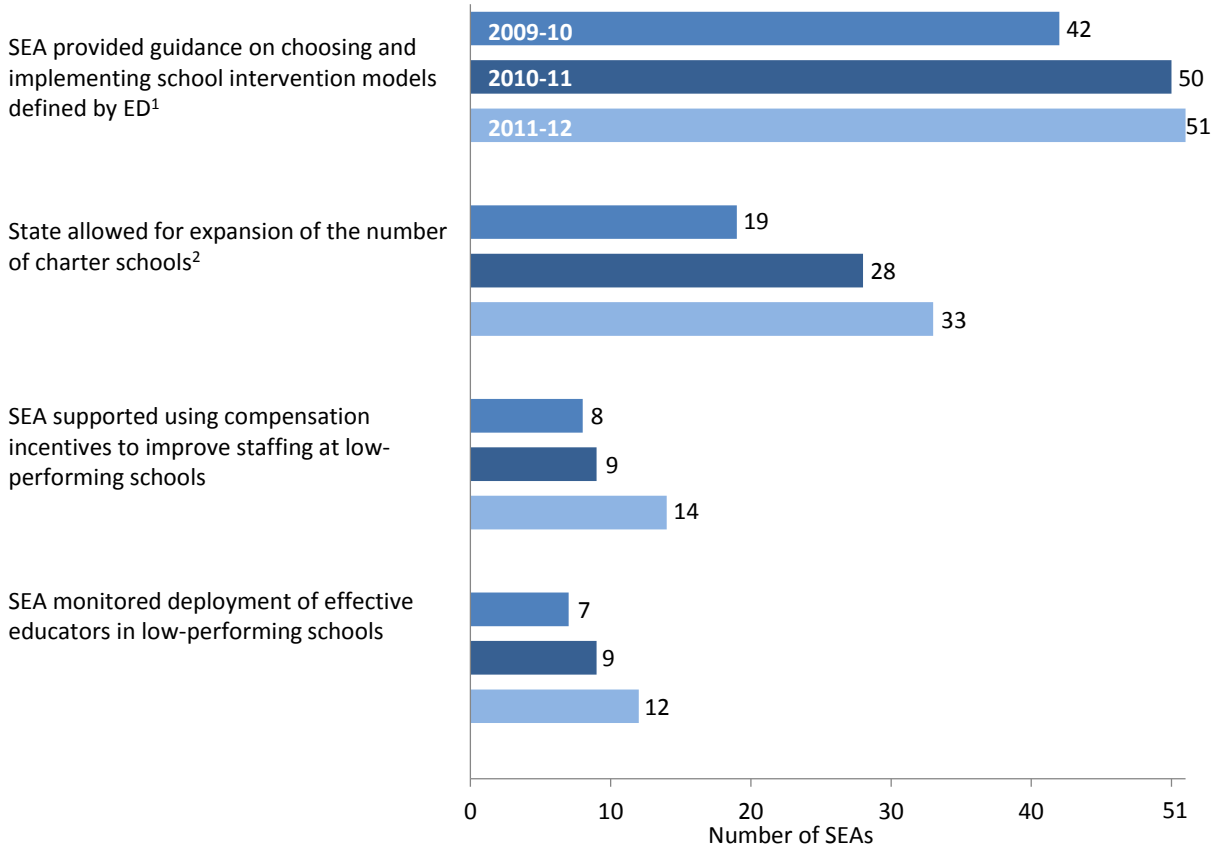


Figure Reads: Forty-two SEAs reported that in 2009-10 they provided guidance on choosing and implementing the school intervention models defined by ED. Fifty SEAs did so in 2010-11, and all SEAs did so in 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years.

[2] In measuring state reform activity for this indicator, if in a previous year a state passed legislation to either increase the permissible number of charter schools or remove prohibitions on charter schools, the state is counted as meeting the indicator in subsequent years.

Note: Respondents include 50 states and DC.

Sources: National Alliance for Public Charter Schools report: *Measuring Up to the Model: A Ranking of State Charter School Laws* (2010 and 2011) and U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys.

Figure ES-11. Percentage of districts with low-performing schools that implemented reforms to support improvement in low-performing schools: 2011-12

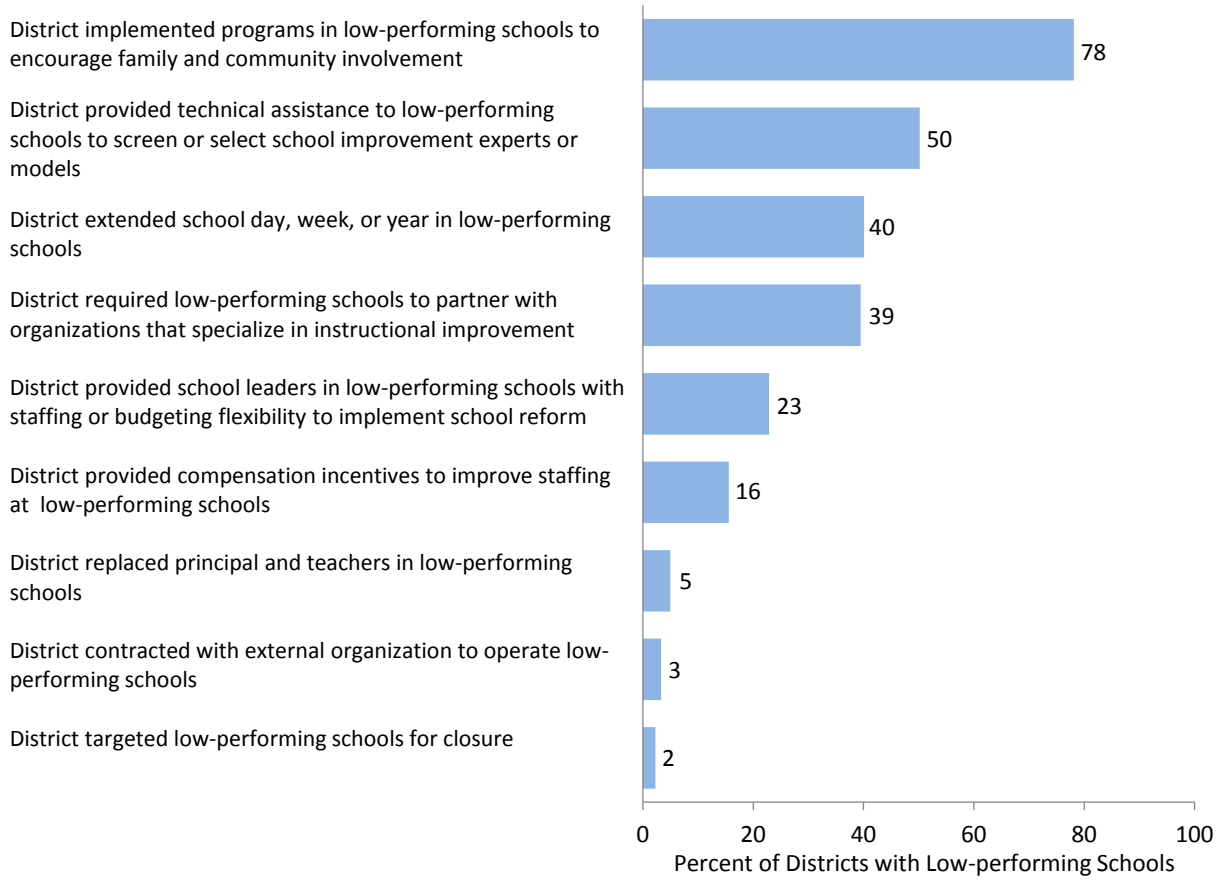
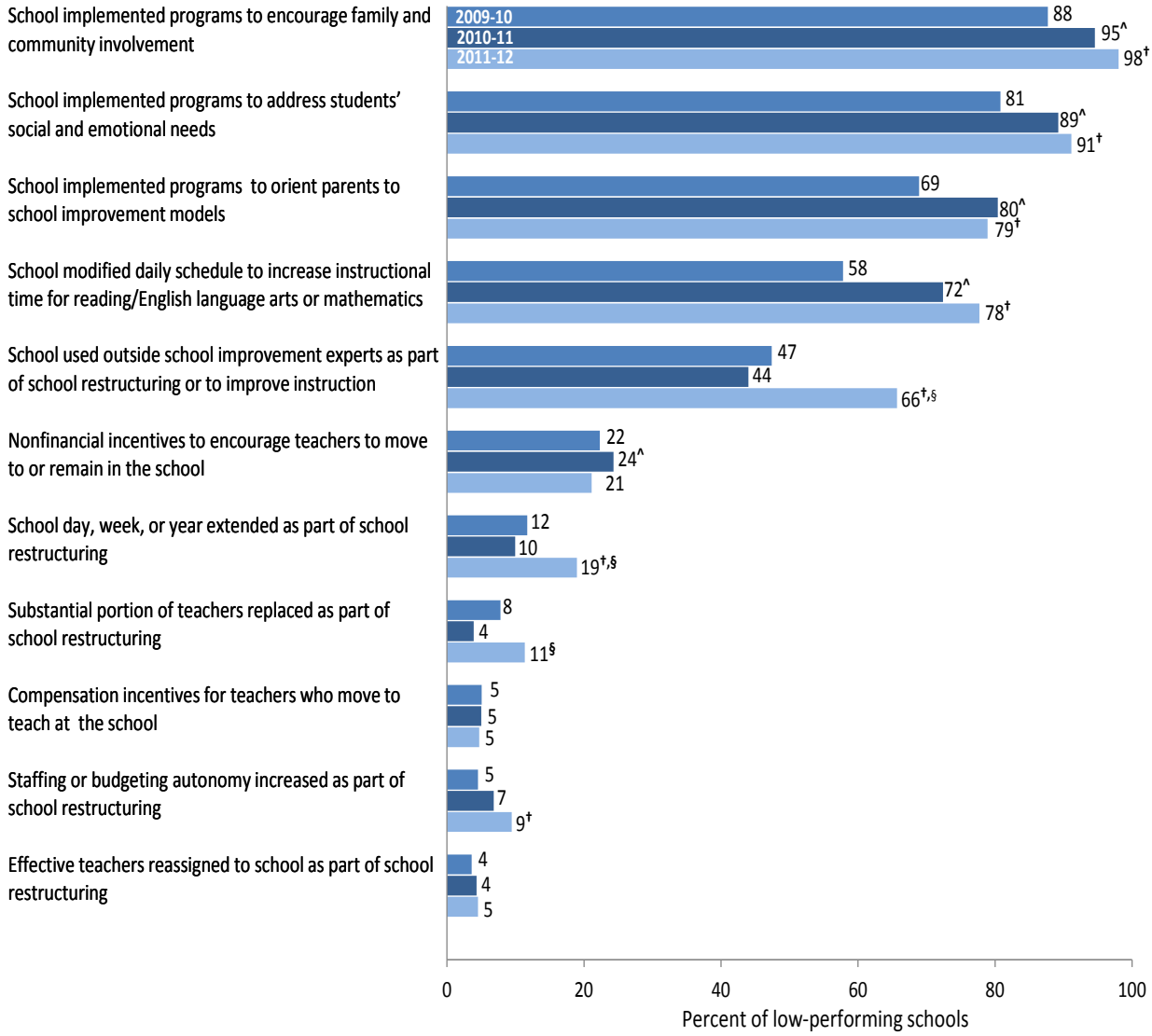


Figure Reads: Seventy-eight percent of districts with low-performing schools reported that in 2011-12 they implemented programs to encourage family and community involvement.
Notes: Low-performing schools include: (1) any Elementary and Secondary Education Act Title I-eligible school designated for improvement, corrective action, or restructuring and (2) any high school, regardless of Title I funding or status, with a cohort graduation rate (i.e., percent of ninth graders who graduate within 4 or 5 years) less than 60 percent over the last several years. In this figure, the denominator is the estimated number of districts that reported in the they had low-performing schools.
Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Figure ES-12. Percentage of low-performing schools that supported improvement: 2009-10, 2010-11, and 2011-12



^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).
†Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).
§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).

Figure Reads: Eighty-eight percent of low-performing schools reported that in 2009-10 they implemented programs to encourage family and community involvement. Ninety-five percent of low-performing schools reported implementing these programs in 2010-11, and 98 percent of schools reported implementing these programs in 2011-12.
Notes: Low-performing schools include schools that were (1) in improvement, corrective action, or restructuring, (2) identified as among the lowest-achieving schools; or (3) have had a graduation rate below 60 percent over a number of years. In this figure, the denominator is the estimated number of low-performing schools.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys. Approved state applications for School Improvement Grants for low-performing schools data. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Challenges Reported by SEAs, Districts, and Schools in Their Implementation of Reforms

In addition to measuring the extent of reform activity, the study examined challenges that SEAs, districts, and schools reported when implementing reforms in 2011-12. The surveys asked states, districts, and schools that were implementing any reforms in an assurance area whether they encountered particular challenges and whether each challenge was a major or minor one. We present for each assurance area, the challenge that was most frequently rated as a major challenge among SEAs, districts, and schools that were implementing the reform (table ES-1).[19] For context, the table includes the number of SEAs or percentage of districts and schools that rated the challenge (i.e., the number of SEAs or percentage of districts and schools engaged in a relevant reform effort).

- Standards and assessments. At the SEA level, the most frequently reported major challenge in 2011-12 was a lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards (16 of the 32 SEAs rating this challenge perceived it as a major challenge).

  At the district and school levels, insufficient funding for supports to help implement the new or revised state content standards was the top major challenge. Sixty percent of districts in CCSS states identified insufficient funding to purchase new instructional materials aligned with new standards as a major challenge in 2011-12. Forty-three percent of schools in CCSS states identified insufficient funding to support instructional specialists or coaches to help teachers implement new standards as a major challenge in 2011-12.

- Data systems. While restrictions in rules and regulations on linking of student data to individual teachers was the most frequently reported major challenge in 2011-12 by SEAs (14 of the 42 SEAs rating this challenge perceived it as a major challenge), the top challenge reported by districts and schools was delays in transmission of assessment results to schools or teachers. Thirty-five percent of districts rated this challenge as a major challenge in 2011-12 as did 21 percent of schools.

- Educator workforce development. Difficulty measuring student growth for teachers of subjects with no standardized tests was rated as a major challenge by 35 of the 46 SEAs rating this challenge in 2011-12.

  Although not asked at the SEA level, large percentages of both districts and schools rated insufficient funding to provide performance-based compensation or differential compensation as major challenges in 2011-12. Eighty-four percent of the districts rating this challenge perceived insufficient funding to provide differential compensation for teachers in high-need areas (e.g., science, technology, engineering, and mathematics subjects) as a major challenge. Seventy-three percent of the schools rating this challenge perceived insufficient funding to provide performance-based compensation to all eligible teachers as a major challenge.

[19] Each challenge could be rated as not a challenge, a minor challenge, a major challenge, or not applicable.

- Improving low-performing schools. Fifteen of the 49 SEAs rating this challenge reported restrictions in rules and regulations regarding the extent of autonomy that LEAs and schools can be granted in terms of staffing or budgets as a major challenge in 2011-12. Insufficient funding to implement whole-school or turn around intervention models was the challenge most frequently reported as major by districts with low-performing schools 2011-12 (by 65 percent of districts rating the challenge). At the school level, restrictions in rules and regulations on replacing less effective teachers was the challenge most frequently reported as major (by 49 percent of low-performing schools rating the challenge).

The study also investigated whether the percentage of SEAs rating challenges as major differed for states that received an RTT grant compared with those that did not.[20]

- With the exception of several challenges related to the improvement of low-performing schools and one challenge related to educator workforce development, in 2011-12 a smaller percentage of SEAs in RTT states rated challenges as major than did SEAs in other states.[21]

[20] At the district level, we examined reports of major challenges by district size and poverty status. We examined school reports of major challenges by performance status. These analyses did not identify clear patterns and are not part of this report.

[21] See chapter 6 for detailed findings.

Table ES-1. Top major challenge when implementing reforms, as reported by state education agencies (SEAs), districts, and schools, by assurance area: 2011-12

Assurance area and level		Challenge most frequently reported as major	Percent that reported challenge as a major challenge
Standards and assessments[1]	SEA	Lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards (16 of the 32 SEAs rated the challenge and perceived it as a major challenge)	50
	District	Insufficient funding to purchase new instructional materials aligned with new standards (95 percent of districts rated the challenge)	60
	School	Insufficient funding to support instructional specialists or coaches to help teachers implement new standards (84 percent of schools rated the challenge)	43
Data systems	SEA	Restrictions in rules and regulations on linking of student data to individual teachers (14 of the 42 SEAs rated the challenge and perceived it as a major challenge)	33
	District	Delays in transmission of assessment results to schools or teachers (94 percent of districts rated the challenge)	35
	School	Delays in transmission of assessment results to school or teachers (93 percent of schools rated the challenge)	21
Educator workforce development	SEA	Difficulty in measuring student growth for teachers in non-tested subjects (35 of the 46 SEAs rated the challenge and perceived it as a major challenge)	76
	District	Insufficient funding to provide differential compensation for teachers in high-need areas (e.g., low- performing schools, science, technology, engineering, and mathematics subjects) (53 percent of districts rated the challenge)	84
	School	Insufficient funding to provide performance-based compensation to all eligible teachers (49 percent of schools rated the challenge)	73
Improving low-performing schools	SEA	Restrictions in rules and regulations regarding the extent of autonomy that LEAs and schools can be granted in terms of staffing or budgets (15 of 49 SEAs rated the challenge and perceived it as a major challenge)	31
	District[2]	Insufficient funding to implement whole-school or turn around intervention models (65 percent of districts rated the challenge)	65
	School[3]	Restrictions in rules and regulations on replacing less effective teachers (76 percent of schools rated the challenge)	49

[1] Percentages limited to SEAs, districts, and schools in states that adopted the Common Core State Standards (CCSS).
[2] Percentages limited to district with low-performing schools.
[3] Percentages limited to low-performing schools.
Table Reads: In 2011-12, 50 percent of SEAs in CCSS states rating this challenge perceived lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards as a major challenge to implementing new or revised state standards and aligned assessments. Thirty-two SEAs rated this challenge.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey, District Survey, and School Survey.

This page intentionally blank.

Chapter 1: Introduction

The American Recovery and Reinvestment Act (ARRA or the Recovery Act) of 2009 provided an unprecedented level of funding for K-12 education. The program created a "historic opportunity to save hundreds of thousands of jobs, support states and school districts, and advance reforms and improvements that will create long-lasting results for our students and our nation."[22] As a way of promoting educational improvement, the Recovery Act required recipients of ARRA funds to commit to reforms in four key policy areas: standards and assessments, data systems, teacher effectiveness, and low-performing schools.

This is the final report of a multi-year U.S. Department of Education (ED) evaluation, *Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role*. ED sought to track the adoption of policies and implementation of practices associated with the education reforms promoted by the Recovery Act at the state, district, and school levels. Other reports have examined the extent to which the Recovery Act saved and/or created jobs,[23] the distribution of Recovery Act education grants to states and school districts,[24] and whether, and how, state education agencies (SEAs) implemented the reforms that the Recovery Act emphasized 1 year after the act was passed.[25]

This report focuses on the implementation of reforms promoted by the Recovery Act 2 full school years after all Recovery Act funds were awarded (i.e., the 2011-12 school year). It describes the status of reform implementation at this time for states, districts, and schools nationwide and investigates whether implementation varied by key characteristics such as whether the state received a Race to the Top (RTT) award funded by the Recovery Act, whether the district was a high-poverty district, and whether the school was a low-performing school. The report provides information on major challenges to reform implementation in 2011-12, based on whether states, districts, and schools rated potential challenges (e.g., lack of staff or expertise, lack of funding) as a major challenge. Finally, since the study collected information about the status of activities in 2009-10, the report includes a discussion of the progress of reform implementation from the time Recovery Act funds were just being distributed.

---

[22] The *American Recovery and Reinvestment Act of 2009: Saving and Creating Jobs and Reforming Education* (March 2009). http://www2.ed.gov/policy/gen/leg/recovery/implementation.html

[23] See for example, U.S. Department of Education. (n.d.). ED Recovery Act Jobs Report (September 30, 2010). Retrieved from http://www2.ed.gov/policy/gen/leg/recovery/spending/impact5.html. (This site includes access to all quarterly ED Recovery Act jobs reports on Recovery Act spending by state through September 30, 2010.) Congressional Business Office. (February 2012). Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from October 2011 through December 2011. Retrieved from http://www.cbo.gov/sites/default/files/cbofiles/attachments/02-22-ARRA.pdf. Information about jobs saved or created for each state under the SFSF can be found in each state's annual performance report, see: http://www2.ed.gov/programs/statestabilization/annual-reports.html.

[24] Garrison-Mogren, R., and Gutmann, B. (2012). *State and District Receipt of Recovery Act Funds—A Report from Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role* (NCEE 2012-4057). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Available at http://ies.ed.gov/ncee.

[25] Webber, A., Troppe, P., Milanowski, A., Gutmann, B., Reisner, E., and Goertz, M. (2014). *State Implementation of Reforms Promoted Under the Recovery Act—A Report From Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role* (NCEE 2014-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Available at http://ies.ed.gov/ncee.

The Recovery Act

The Recovery Act allocated $70.6 billion in funding for K-12 education, of which $68.8 billion was awarded to states through a combination of newly created and existing grant programs. Through the new State Fiscal Stabilization Fund (SFSF), ED awarded $39 billion in Education State Grants. ED distributed these grants to all states by formula, and they were primarily intended to help fill state budget shortfalls and to save and create jobs, including those of teachers and school administrators. New discretionary grant programs included Race to the Top (RTT) and the Investing in Innovation Fund (i3), which awarded $3.9 billion and $646 million, respectively, and which were intended primarily to support education reforms.

In addition, 10 existing programs, both formula funded and competitive, received a $24.9 billion infusion of funds to support activities authorized under general program authority. All states received formula grant funds for Individuals with Disabilities Education Act, Part B State Grants and Preschool Grants; Title I Part A; School Improvement Grants (SIG); Education for Homeless Children and Youth; and State Educational Technology grants ($24.2 billion). ED also awarded additional funds through Impact Aid formula grants and through competitive Impact Aid; Statewide Longitudinal Data Systems (SLDS), and Teacher Incentive Fund (TIF) grants ($544 million).[26] Most of the additional funds were not explicitly focused on promoting reform. The exceptions are the TIF and SIG programs. Even before the Recovery Act, the activities authorized for these programs were reform oriented. Authorized activities for competitive TIF grants include creating sustainable performance-based compensation systems. The $3 billion in additional funding for the SIG program was allocated as formula grants to SEAs. SEAs then make competitive sub-grants to districts that demonstrate the greatest need for the funds and the strongest commitment to use the funds to raise substantially the achievement of students in their lowest-performing schools.

ED allocated most of the Recovery Act formula grant funds by September 2009 and the competitive grant awards by September 2010. As described in an earlier report from this evaluation, individual states received between $1,063 to $3,632 per pupil from Recovery Act grants for K-12 education.[27] Much of the variation in funding across states reflects the receipt of competitive grant funds, most notably RTT. For most K-12 programs funded by the Recovery Act, states were required to subgrant to local education agencies (LEAs) and were encouraged to make these subawards quickly. Most LEA subgrants were awarded by the end of 2010.[28] However, for some programs—specifically RTT and SIG—it took longer for funds to begin flowing to LEAs and much longer for all funds to be distributed.

[26] For information about the authorized activities for each of these programs, see table 1 of Garrison-Mogren and Gutmann, 2012.

[27] See Garrison-Mogren and Gutmann, 2012.

[28] See p. 1 of Garrison-Mogren and Gutmann, 2012, for more information about the specific grant awards to individual states and the timing of funds allocated to states and districts.

The Four Assurance Areas

In return for Recovery Act grants, states were required to commit to advancing four specific education reform priority areas, or "assurance areas":

- "Making progress toward rigorous college- and career-ready standards and high-quality assessments that are valid and reliable for all students, including English language learners and students with disabilities,

- Establishing pre-K to college and career data systems that track progress and foster continuous improvement,

- Making improvements in teacher effectiveness and the equitable distribution of qualified teachers for all students, particularly students who are most in need and

- Providing intensive support and effective interventions for the lowest-performing schools." [29]

The four assurance areas were intended by the act's drafters to constitute an integrated, comprehensive vision of educational improvement that would be capable of raising the academic performance of all public school students. The vision embodied in the assurance areas begins with high expectations and accountability for student achievement (i.e., shared, rigorous standards and appropriate assessments). To support this vision, the Recovery Act's programs encouraged the development of data tools that can provide information to both help educators identify needs for improvement and provide feedback on the impact of educational changes on student learning. The act also recognizes the importance of effective educators by emphasizing improvements in their preparation, evaluation, and compensation and on achieving a more equitable distribution of effective teachers across schools within LEAs. Finally, to upgrade persistently low-performing schools, the act's programs provide incentives and tools for intervening in and improving these schools.

By linking a commitment to the four assurance areas with receipt of funding, the Recovery Act signaled federal priorities; provided states, districts, and schools with incentives to initiate or intensify reforms in each of these areas; and encouraged states to pursue a combination of mutually supporting reform strategies. The type and strength of incentives embedded in the Recovery Act varied by grant program, however. For example, to receive SFSF funds, governors had only to agree to advance the four assurance areas with their funding applications. In contrast, the RTT grant competition gave substantial weight to states' enactment of specific policies in these assurance areas, such as the adoption of the Common Core State Standards (CCSS), participation in one of the multi-state assessment consortia, implementation of a statewide longitudinal data system, and the development of performance-based teacher evaluation systems. Applicants were also judged on their plans to support the implementation of these education reforms that would be funded, in part, by RTT grants. And some programs, like the Title I SIG program, were more prescriptive, requiring schools targeted for SIG support to implement one of four school improvement models.

---

[29] *The American Recovery and Reinvestment Act of 2009: Saving and Creating Jobs and Reforming Education* (March 2009). http://www2.ed.gov/policy/gen/leg/recovery/implementation.html

The Role of States, Districts, and Schools

Though states (and their SEAs) are the primary focus of the four assurance areas and the primary conduits for the act's financial assistance, understanding the progress of the reforms promoted by the act also requires examining reform activity at the district and school levels. This is important because (1) states differ in the degree to which state policy determines district and school action, (2) state policy regulates or enables activities or programs for which districts or schools are responsible, and (3) a few of the act's component programs bypassed the state level to provide funds directly to districts promising to undertake specific reforms that were related to the assurance areas.

Given the decentralized nature of the U.S. education system and the variation in the degree of local control across the states, districts have especially important roles in implementing the Recovery Act's vision. For example, though the expectation for state leadership on student standards was clear, districts have a role in implementing standards. Some states do not require districts to adopt these standards or state-developed curricular materials aligned with them. States vary widely in their role in providing professional development to educators on topics such as implementing new standards (see, for example, Goertz, 2005). States were also expected to make progress toward developing comprehensive data systems, but districts use the data to evaluate instructional programs and educators. Districts also train educators in data use and provide access to state data though district information systems. Responsibility for the quality of the educator workforce is shared. The RTT component of the act provided states with incentives to remove barriers to evaluating educators based on the achievement of their students, and resources support more rigorous evaluation systems. But while states may put regulations into effect or provide assistance in support of new educator evaluation or compensation systems, districts as employers evaluate and pay educators. A few Recovery Act programs such as i3 and TIF provided money directly to local entities, bypassing the state and providing direct incentives for district action. Charting the progress of the Recovery Act's vision thus requires attention to district activities related to the four assurance areas.

While the Recovery Act provided incentives to change state and district policies, it is at the school level where policies and programs affect students. Moreover, districts, like states, may adopt different strategies for the implementation of the reforms promoted by the act. For example, some districts create and mandate the use of a system-wide curriculum, while others delegate the selection of curriculum and instructional materials to their schools. Responsibility for the level and content of professional development is often shared between schools and districts. Some districts have a centralized process for hiring and placing teachers, while other districts leave these decisions in the hands of school leaders. Districts also may implement educator compensation or evaluation reforms in subsets of schools. Some districts mandate the use of particular school-turnaround models; others leave the choice to the school. Some districts have a high proportion of low-performing schools, while others have only a small proportion. One of the act's components, SIG, required states to direct most of their SIG funds to districts and schools in return for promises of reform at the school level, including the adoption of prescribed school-turnaround models. Understanding the reach of the reforms promoted by the Recovery Act thus requires an examination of their use at the school level.

The Recovery Act and Ongoing Education Reform

As described in succeeding chapters of this report, the Recovery Act was introduced into an ongoing stream of federal, state, and local reform. Many of the reforms promoted within each of the four assurance areas were built on prior reform activity or were already being implemented in some form. Standards have been a foundational element of state and federal policy since the 1994 reauthorization of the Elementary and Secondary Education Act (ESEA), and all 50 states had academic content standards prior to the Recovery Act. Regarding data systems, the federal government was already encouraging states to build student data systems through the Statewide Longitudinal Data Systems (SLDS) grants. In the area of educator effectiveness, Florida, Minnesota, North Carolina, and Texas had introduced efforts to promote educator effectiveness through compensation reform. In addition, the first two rounds of the TIF grants encouraged states and districts to experiment with performance-based compensation. Federal concern with low-performing schools has been long standing, including both requiring states to identify these schools and providing resources for improving them. In parallel, states, districts, and foundations have experimented with a wide variety of interventions aimed at improving these schools' performance.

The Recovery Act program initiatives were intended to build on the successes and address the limitations of policies that were in place at the time. For example, states' expectations for students differed considerably (National Center for Education Statistics, 2011), and there was concern that state standards did not necessarily represent what students need to know and be able to do to succeed in college and today's workplace. These shortcomings led to federal incentives for states to adopt the CCSS and corresponding assessments. Recovery Act program initiatives in the area of educator effectiveness sought to encourage nationwide adoption of the reform efforts on which some states and districts had been working and expand the efforts through the TIF program. Funding for the SLDS program was increased through the Recovery Act. Sizable increases to SIG funding through the Recovery Act led to new program requirements for states to pass along funds competitively to districts and schools willing to implement one of four school intervention models. These models both built on prior strategies and attempted to promote coherence.

Because of the differing roles of states, districts, and schools in education reform; variation in previous reform activities by these levels; and the different design and foci of the programs making up the Recovery Act, this study was designed to capture implementation of education reforms within each assurance area at all three levels. The next section of this chapter provides an overview of the key research questions and the study's methodology.

Study Questions and Methods

This study was designed to capture implementation of the reform agenda promoted by the Recovery Act at the state, district, and school levels for each of three school years: 2009-10, 2010-11, and 2011-12. This report focuses on reform implementation as of 2011-12, the second full school year after all Recovery Act funds were awarded. The implementation of reforms, such as the CCSS, new assessments, and performance-based teacher evaluation systems, unfolded over multiple years. For example, some states were engaged in the planning stage of reforms during 2010-11 and began implementation in later years. Because the implementation of certain reforms began before passage of the Recovery Act, state, district, and school activity during the 2009-10 school year provided a baseline

for the study, capturing the reforms already in place when Recovery Act funding was just beginning to be distributed.

Study Questions

Specifically, this report addresses the following questions:

- To what extent did SEAs, districts, and schools report implementing key reform strategies promoted by the Recovery Act in the 2011-12 school year?

- How much of the 2011-12 school year implementation reflects progress since the Recovery Act?

- Did the extent of reform in the 2011-12 school year vary by relevant state, district, and school characteristics?

- What were the greatest reform implementation challenges for SEAs, districts, and schools in the 2011-12 school year?

The report does not assess the relationship between the amount of Recovery Act funds received or the receipt of funds from specific grant programs and the implementation of reforms. All states committed to the four core reforms or assurance areas as a condition for receiving funds, and more than 90 percent of the Recovery Act funding was awarded by formula to all states. Furthermore, much of the variation in per pupil Recovery Act funding by state appears to be driven by receipt of competitive grant funds (Garrison-Mogren and Gutmann, 2012, p. 20). Most of the states with the highest funding per pupil are those that won an RTT grant in the first two rounds of this competition. As a result, examining reform implementation by state per-pupil Recovery Act funding would primarily pick up differences by state RTT status, which this report already examines.

At the district level, it is difficult to accurately account for all funding (or benefits) received by districts from all Recovery Act programs.[30] Additionally, some reforms depend on, or are facilitated by, state actions (and likely funded by dollars retained at the state level). An analysis of district funding and reform implementation would miss this effect. Finally, the Recovery Act was introduced into an ongoing stream of federal, state, and local reform making it difficult to isolate the effect of the Recovery Act on state, district, or school adoption of particular reforms. Rather, the report provides a snapshot of the status of reforms at particular points in time. The study did not collect information about the reasons why states, districts, and schools adopted or implemented these policies and practices. In addition, the report does not address whether state, district, or school implementation of more reforms constitutes an integrated and comprehensive reform approach.

[30] For example, the subgrant data in Recovery.gov do not systematically include subgrants of less than $25,000. For the i3 and TIF programs, the grantee could be a non-profit or a consortium of districts, making it difficult to assign award amounts to individual districts.

Data Sources

The findings in this report draw primarily from surveys administered to all 50 SEAs and the District of Columbia (DC) and nationally representative samples of school districts and schools during spring 2011 and spring 2012. For the SEA survey, respondents were the chief state school officer or other state agency officials designated by the chief as most knowledgeable about the topics in the survey (e.g., associate or deputy superintendent, director of curriculum and instruction, director of assessment and accountability). For the district survey, respondents were district staff most knowledgeable about the topics in the survey. Principals responded to the school survey.

We developed the SEA survey to describe state adoption of specific education policies and programs (including specific elements of states' evaluation, compensation, and data systems), the state role in supporting implementation of these reforms, and challenges in implementing the reforms in each of the four assurance areas. The district survey focused on district adoption of specific education policies and use of strategies to support and promote reform policies at the school level and asked about challenges implementing strategies. The school survey focused on whether specific practices or strategies associated with implementing state or district policies or programs related to the assurance areas were being used in schools, where reform is most likely to affect students. The survey also asked school leaders about the challenges they encountered when implementing specific practices.

The survey items were designed to capture the key reform practices or strategies ED identified in its grant notices, regulations, and guidance for the Recovery Act programs. We drew on the specific strategies and activities described in SFSF assurance indicators and descriptors, the RTT selection criteria, and guidance for the Title I-ARRA and SIG programs.[31]

While the state, district, and school surveys covered parallel topics, individual survey items were tailored to focus on activities most relevant to a particular level. For example, in the case of standards and assessments, the SEA survey asked about state adoption of the CCSS and other new or revised content standards, then focused on specific state activities that supported the implementation of content standards, including professional development, instructional materials, and assistance to LEAs in curriculum mapping. The district survey, in turn, asked about the distribution of instructional materials to schools and whether the district made available or provided professional development on the new or revised state content standards to educators. The school survey asked what practices the school used to implement new or revised state content standards such as educators' receipt of professional development, use of curriculum frameworks, or use of curriculum aligned with the new or revised state content standards. For additional details about survey development, see appendix A.

The spring 2011 surveys asked about SEA, district, and school activities in 2009-10 and 2010-11. The spring 2012 surveys asked about SEA, district, and school activities in 2011-12.

---

[31] See: U.S. Department of Education. (2010). Overview Information; Race to the Top Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. *Federal Register*, *75*(71). Available from http://www.gpo.gov/fdsys/pkg/FR-2009-11-18/pdf/E9-27427.pdf. U.S. Department of Education. (2009, November). State Fiscal Stabilization Fund Program; Final Rule. *Federal Register*, 74(217): 58436-58525. Available from http://www2.ed.gov/legislation/FedRegister/finrule/2009-4/111209a.pdf. U.S. Department of Education. (2010). School Improvement Grants; American Recovery and Reinvestment Act of 2009 (ARRA); Title I of the Elementary and Secondary Education Act of 1965, as Amended (ESEA). *Federal Register, 75*(208): 66363-66371. Available from http://www.gpo.gov/fdsys/pkg/FR-2010-10-28/pdf/2010-27313.pdf

Extant data provided information about state-level reform activity in two areas: removing or reducing limits on charter schools and characteristics of SLDS. The National Alliance of Public Charter Schools publishes an annual review of state charter school laws. We also used annual performance data that states reported to ED for the SFSF program to provide information about state education data systems.

District and School Sample Design

SEAs in the 50 states and the District of Columbia were surveyed. For the district and school levels, the study selected nationally representative samples of school districts and schools that were in operation in the 2010-11 school year. The district sample of 1,700 school districts was selected using an enrollment-driven design, where districts with more students enrolled were more likely to be selected than they would have otherwise. We also oversampled high-poverty districts to support subgroup analyses for this population of interest. Within the high-poverty stratum and its complement stratum, there were geographic strata to ensure that each RTT state had at least one district represented in the sample and to balance districts in other states broadly across the U.S. Within each stratum, we sorted districts into an ordered list based on their charter status, TIF status, urban-centric locale code, and enrollment and sampled systematically using this sorted list. Districts with one school (e.g., these can be charter schools that also are a district) were undersampled to minimize the numbers of these districts in the final sample, while still representing them in the nationally representative sample.

Within the sampled districts, we drew a sample of 3,800 schools, selecting at least two sampled schools in each district.[32] The school sample used an enrollment-driven design to give larger schools a higher chance of selection than they would have otherwise. We oversampled persistently lowest-achieving (PLA) schools to support subgroup analyses of low-performing schools. The school sample was selected using a statistical method called "balanced sampling," which controlled the number of schools sampled for each sampled district and balanced across school grade span (elementary, middle, high, other) and school performance (PLA, schools in need of improvement non-PLA, and other schools).[33] See appendix A for more details on the district and school sample designs.

Data Collection

The surveys were fielded in spring 2011 and spring 2012, using the same sample of districts and schools for both administrations. All SEAs responded to both surveys. For the 2011 data collection, 88 percent of districts (unweighted) and 78 percent of schools responded to the web surveys. The response rates increased to 91 percent for districts but decreased to 72 percent for schools in the 2012 data collection. District and school estimates and standard errors in this report were based on replicate weights that take into account the complex sample design and survey nonresponse adjustments. See appendix A for more information on the weighting approach.

---

[32] Unless the sampled district had only one school, in which case we selected that school with certainty into the sample.

[33] While enrollment-based probabilities (i.e., probability of selection proportionate to size, or PPS) were used to select the district and school samples, the report's research questions ask about the number and percentage of districts and schools implementing reforms. Thus, unit-based weights (i.e., those that estimate total numbers of districts and schools) were developed and used for the analyses in the report. These provide unbiased estimates, but do have higher variability (i.e., more sampling variance, which in turn leads to higher standard errors) than weights based on enrollment. Note that at the school level, school enrollment sizes are less variable than the district enrollment sizes, so the design effects from having unit-based estimates with a PPS sample are smaller for schools than for districts. See appendix A for more information.

Indicators of Reform

To address the study questions, we developed indicators of reform implementation at the state, district, and school levels. The indicators reflect ED's priorities and key reform strategies within each of the four assurance areas. The indicators were designed to provide a high-level snapshot of whether SEAs, districts, or schools had a particular policy in place, provided support, or carried out a particular activity. The indicators do not describe the quality or intensity of reform implementation. As discussed below, for most indicators, an SEA, district, or school was said to have met an indicator if it reported implementing any one of a particular set of related strategies. For a smaller set of indicators, an SEA or district met the indicator only if it met more than one requirement. At the state level, we created 18 indicators of reform implementation using SEA survey items and extant data. At the district level, we created 21 indicators of reform implementation, and at the school level, we created 22 indicators of reform implementation from survey data. See appendix B for the components, decision rules, and specific Recovery Act requirements embodied in each indicator. Subsequent chapters on each assurance area provide context and rationale for each indicator.

Because of the variety of potential SEA and district responses to Recovery Act reform requirements and because assurance areas could be met by using different approaches, the indicators often captured several ways in which a state, district, or school might implement a reform. For example, SEAs could use multiple strategies in their role to improve standards and assessment, from providing professional development directly to supporting LEA professional development through guidance and technical assistance. Similarly, districts could use multiple strategies to support or promote the implementation of new standards and assessments in schools, from distributing instructional materials to providing criteria for schools to use when selecting new aligned curriculum. Where appropriate, the indicators include multiple strategies and do not assume that one approach is preferable to another. Some Recovery Act programs, however, have more prescriptive requirements. In these cases, states and districts had to take specified actions, such as adoption of the CCSS or the inclusion of student growth measures in educator evaluation systems, to meet an indicator.

Finally, some reform activities measured in the SEA indicators have the potential to continue over multiple years once they are instituted. For example, when a state issues standards or guidelines for teacher preparation programs, these are likely to remain in effect until new or revised standards or guidelines are issued. So, this one time action of issuing standards can represent a support for a reform effort that is ongoing or continued in future years. In measuring SEA reform activity for selected indicators, if a state reported activity in a previous year, the SEA is counted as meeting the indicator in subsequent years. See appendix A for additional detail about which SEA activities were considered ongoing over multiple years.

Analysis Methods

The report presents the prevalence and progress (between 2009-10 and 2011-12) of reform implementation at the state, district, and school levels for each assurance area. In addition, we examined the status of reform implementation by selected SEA, district, and school characteristics. We also report on the number or percentage of SEAs, districts, and schools that rated various potential challenges as "major challenges" to implementing reforms in 2011-12. As a summary for each assurance area, we describe similarities and differences among the state, district, and school levels in implementation progress. For all but the data systems assurance area, we also describe similarities and

differences among the three levels on the challenges perceived by those implementing reforms.[34] These descriptive analyses are discussed below.

Measuring status and progress of reform implementation

For each assurance area, we examined the extent of reform activity at the three levels (SEAs districts, and schools) in two ways. We first describe the prevalence of reform by examining the number (for SEAs) or percentage (for districts and schools) that met each indicator in 2011-12. This analysis provides the basic snapshot of SEA, district, and school status on the Recovery Act reform agenda 2 school years after all funds were awarded to states (i.e., 2011-12). Second, we compare the number or percentage of SEAs, districts, and schools that reported they had a reform already in place in 2009-10 with the number and percentage that reported they had the reform in place by 2010-11 and 2011-12 to get a measure of new activity or progress over time.[35] That is, we discuss the change in the total number of SEAs or percentage of districts and schools implementing reforms from one year to the next. Note that change over time in the number of SEAs or the percentage of districts and schools represents a net change.[36] The surveys did not ask about reforms in place prior to 2009-10, or how long a particular reform had been in place.

Measuring status of reform activity by selected characteristics

In addition to examining the extent of reform activity across all SEAs, districts, and schools, we compared the extent of reform activity in 2011-12 by several SEA, district, and school characteristics to determine if certain types of entities were more likely to report implementing reforms than others.

At the state level, we examined reform implementation by whether the state received a first or second round RTT award. Because states received RTT awards based, in part, on their actual and planned implementation of reforms similar to those included in the Recovery Act, these states may be expected to be farther ahead on these reforms, compared with other states, by 2011-12.

At the district level, we examined reform implementation by district poverty status and district size.[37] High-poverty districts have been a long-standing focus of federal educational policy. These districts have had high levels of prior exposure to and participation in federal education programs in which funding is directly or indirectly linked to incidence of poverty. These additional resources, plus experience complying with related federal requirements, may have built the reform capacity of high-poverty districts and disposed them to be especially responsive to federal reform initiatives. In addition, since poverty is inversely related to student achievement, stakeholders in higher poverty districts may

[34] A comparison of challenges perceived by SEAs, districts, and schools was not conducted for the data systems assurance area because there are no directly comparable challenges common to all three levels.

[35] The analysis of progress over time for the standards and assessments assurance area was limited to the 2010-11 and 2011-12 school years since the Common Core State Standards were not in place in 2009-10.

[36] It is possible that an individual SEA, district, or school could have discontinued a reform strategy even though the total number of SEAs or percentage of districts and schools increased over time. In addition, since the district and school analyses were not limited to entities that responded to both surveys, changes in survey respondents from one year to the next can also influence the net change observed.

[37] High-poverty districts are defined as those with a child poverty rate above 21.66 percent. District size is based on the student enrollment in schools in the district. Large districts have at least 50,000 students. Medium districts have fewer than 50,000, but at least 15,000 students. Small districts have fewer than 15,000 students.

also perceive a greater need for reform. We therefore compared reform implementation in high-poverty districts with reform implementation in other districts to determine whether high-poverty districts were more likely to have made progress in implementing Recovery Act reforms. This contrast is also motivated by the Recovery Act's focus on equity.

Because large districts are likely to have developed greater district-wide administrative capacity to support educational operations and educational change than districts with smaller enrollments, large districts are likely to have greater capacity to implement Recovery Act reforms. For example, prior research suggests that larger districts invest more resources in specialized staff and systems in the areas of assessment, curriculum support, human resources, and technology.[38] Also, the National Assessment of Title I found that very large districts had more staff available to provide assistance to low-performing schools than smaller districts.[39] As a result, these districts may possess the specialist expertise and infrastructure to implement the Recovery Act's provisions regarding low-performing schools more fully than is likely in districts with smaller enrollments. This additional management capacity may also create economies of scale in leveraging per-pupil funding allocations toward reform implementation. While larger districts are more likely to receive Title I funds, size is not always correlated with poverty (which drives Title I funding allocations), and Hannaway and Kimball (1998) found that size was related to reform activity after controlling for district poverty. Thus, we examined whether large districts achieved higher levels of reform implementation than smaller districts during the period covered by this study.

For three of the four assurance areas, we also examined differences in reform implementation between schools identified as low performing[40] and schools not so identified. We include this comparison because of the emphasis throughout the act's education provisions on improving the performance of students in low-performing schools. We include these comparative analyses for the assurance areas on standards and assessments, data systems and use, and educator workforce development. For the assurance on improving low-performing schools, we present findings on reform implementation for low-performing schools only.

Reported challenges in implementing reforms

We examined challenges that SEAs, districts, and schools reported in implementing reforms in 2011-12.[41] The surveys asked states, districts, and schools that were implementing any reforms in an assurance area (e.g., standards and assessment) whether they encountered a particular challenge and whether the challenge was a major or minor one. For each assurance area, we present the number of implementing states and the percentage of implementing districts and schools that considered any issue

---

[38] See analyses of differences in education capacity among districts based on enrollment size: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service, *Title I Accountability Systems and School Improvement from 2001 to 2004*, Washington, D.C., 2006.

[39] Institute of Education Sciences (2007). *National Assessment of Title I, Final Report: Volume I: Implementation. Washington, DC: U.S. Department of Education*, p.74

[40] Low-performing schools include schools that (1) were in improvement, corrective action, or restructuring under Title I, ESEA; (2) were identified as among the lowest-achieving schools; or (3) had a graduation rate below 60 percent over a number of years.

[41] We also examined SEA reports of major challenges by state RTT status. Chapter 6 presents these findings. At the district level, we examined reports of major challenges by district size and poverty status. We examined school reports of major challenges by performance status. These analyses did not identify clear patterns and are not part of this report.

a "major" challenge. For context, we also present the number or percentage of SEAs, districts, and schools rating the challenge (i.e., the number or percentage engaged in a relevant reform effort).

Interpretation of results

Several factors affect interpretation of indicator results. First, the survey asked SEAs, districts, and schools to self-report on their reform activity. Some respondents may have over- or under-stated their status in implementing reforms promoted by the act. Second, the surveys relied on closed-ended questions to ask about particular reform policies, programs, strategies, and practices. It is possible that SEAs, districts, and schools may have been working on a reform in a way not captured by our survey questions. Third, the indicators represent a high-level snapshot of SEA, district, and school response to Recovery Act reform priorities and do not measure the intensity or quality of reform efforts. The surveys were designed to collect information about many different reform activities. Because the survey asked about a wide range of activities, SEAs, districts, and schools were asked to indicate whether any activity occurred in the given year, rather than describe the nature of each activity in detail. The first factor may limit the validity of some results, while the second two factors suggest caution in drawing conclusions about the depth or quality of reform efforts. For example, two states or districts might have responded that they had supported or implemented training for educators on new standards, but the quality and duration of that training could have differed substantially.

Report Contents

The report is organized by the four reform assurance areas, with a separate chapter for each area: standards and assessments (chapter 2), data systems (chapter 3), educator workforce development (chapter 4), and support for low-performing schools (chapter 5). Within each chapter, we discuss the following at the state level first, then again at the district and school levels:

- Context for each assurance area, including previous federal reform efforts, new initiatives or augmentation of existing initiatives brought about by the Recovery Act, and a description of the specific reform implementation indicators we examined.

- Implementation in 2011-12: the number of SEAs and percentage of districts and schools meeting each indicator.

- Progress from 2009-10 to 2011-12: the number of SEAs and percentage of districts and schools that were already implementing a reform in 2009-10 compared with the number and percentage implementing in 2010-11 and 2011-12.

- Implementation in 2011-12 by relevant characteristics: the percentage of SEAs, districts, and schools meeting each indicator by several characteristics to determine if certain types of entities were more likely to implement reforms than others.

- Challenges reported in 2011-12: the number of SEAs and percentage of districts and schools reporting major implementation challenges within each reform area.

The last section of each chapter includes a cross-level comparison of the progress of reform implementation and challenges in 2011-12. The final chapter (chapter 6) provides an overview of state, district, and school reform implementation across the four assurance areas; and includes an analysis of state reports of major challenges by RTT status.

This page intentionally blank.

Chapter 2: Standards and Assessments

The Recovery Act cited the state-level adoption and implementation of rigorous college- and career-ready standards and aligned high-quality assessments as pivotal steps in accelerating educational improvement throughout the United States. To facilitate these steps, the act authorized states to use appropriated funds to advance reforms in these areas. As a condition for receipt of SFSF funds, the Recovery Act held states accountable for improving state academic standards and enhancing the quality of academic assessments.

State content standards have been a central priority of ESEA since its 1994 reauthorization which required states to establish statewide standards in reading and mathematics in selected grades and to implement statewide assessments and accountability systems for evaluating school-level performance. No Child Left Behind (NCLB) extended and strengthened this priority by requiring standards and assessments in grades and subjects not previously covered under the 1994 ESEA and by establishing additional rules for state accountability systems. In the wake of these policies, however, the content and rigor of standards and assessments continued to vary among states. In addition, as the Secretary of Education stated in 2010, "we need to raise our standards so that all students are graduating prepared to succeed in college and the workplace."[42] To improve the measurement of student achievement and to help educators improve instruction, ED also cited the need for improved student assessments aligned to rigorous standards (U.S. Department of Education, 2010b).

With a priority on adoption of common standards focused on college- and career-readiness and common assessments, the Recovery Act and the RTT criteria signaled support for state collaboration. One articulation of these policies, the final SFSF rules issued in November 2009, encouraged "states to work together to develop and implement common, internally benchmarked standards and assessments aligned to those standards, in order to ensure that students are college- and career-ready." While the act did not explicitly endorse the CCSS, new policies established incentives for states to adopt the CCSS in reading/English language arts and mathematics. The CCSS were developed by the National Governors Association, the Council of Chief State School Officers, and other national organizations as college- and career-readiness standards and released in June 2010. The CCSS are grade-by-grade standards intended to: (1) set the same rigorous standards for all students, regardless of where they live; (2) align standards to the expectations of higher education and the 21st century workplace; (3) enable parents, educators, and policymakers to track the progress of students in meeting college- and career-ready standards at each grade throughout elementary and secondary schooling; (4) provide guidance for instructional practice, the design of curricula and instructional materials, professional development, and the content of teacher education; and (5) provide the basis for evaluating and holding students, teachers, schools, and school districts accountable for student learning (Common Core State Standards Initiative, 2012). Adoption of common standards also was intended to facilitate states working together to develop common assessments and to update those standards as needed over time, saving states time and money and reducing redundancy and inconsistencies across states.

Under the Recovery Act, ED funded two multi-state consortia, the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC), to develop the next generation of K-12 assessments for the general student population. These assessments are designed to align with the CCSS, produce common measurements of student growth and

[42] U.S. Department of Education, 2010a.

performance across states, and support state and local accountability for the CCSS. The consortium-developed tests are expected to be in place in the 2014-15 or 2015-16 school years.

The Recovery Act programs also provided incentives for school districts and others to support the transition to the new standards and aligned assessments. School districts and partnerships of districts or schools with nonprofit organizations could apply directly for i3 grants. One of the priority areas for the grants was to fund innovations that complement the implementation of high standards and quality assessments. As part of the RTT grant selection criteria, participating districts were to collaborate with their SEAs to develop a high-quality plan to support the transition to college- and career-ready standards and aligned assessments.

When implemented, the CCSS and aligned assessments were expected to constitute a significant change in educational approach and accountability for most states. Implementation of these standards and aligned assessments requires actions at the state, district, and school levels. To provide a picture of the prevalence and progress of the reforms promoted by the act, we identified and examined indicators of reform at all three levels.

Using these indicators, this chapter describes the state, district, and school adoption and implementation of improved educational standards and assessments, including the provision of applicable tools and supports for implementing reform. We also report on the major challenges to implementing these reforms as perceived by survey respondents at each level. We also examine whether the prevalence of reform during the final year of the study varied by key state, district, and school characteristics. For states, we compare implementation by those states awarded RTT grants and all other states. For districts, we compare reform implementation by district poverty status and district enrollment size. For schools, we compare those that are low performing with all other schools. We conclude the chapter with a comparison of progress and challenges across levels.

Key Findings Across Levels

- **More SEAs and higher percentages of districts and schools in CCSS states supported implementation of new standards by providing professional development and curriculum assistance in 2011-12 when compared with 2010-11 (figures 2.1, 2.3, and 2.6).**
- **A lack of curriculum and instructional materials aligned with new standards was a prevailing challenge across SEAs, districts, and schools in CCSS states in 2011-12 (tables 2.1, 2.2, and 2.3). This challenge was reported most frequently or second most frequently across the three levels.**
- **An area with few reports of major challenges in 2011-12 was the concerns or possible opposition of staff, staff unions, parents, or others regarding the adoption and implementation of improved standards and assessments**.

State-Level Findings

In this section, we first describe the study's state-level indicators of reform in the improvement of standards and assessments. We then use the indicators to describe SEAs' implementation of these reforms in 2011-12 and progress from 2010-11 to 2011-12.[43] Next, we report on whether a greater percentage of RTT states implemented the reforms in 2011-12 compared with states that did not receive RTT grants. Last, we conclude this section with a report of the major challenges in implementing new or revised state standards and aligned assessments, as reported in 2011-12 by SEAs in states that had adopted the CCSS.

State-Level Reform Indicators

Traditionally, states have responsibility for establishing and implementing content standards. States also have typically facilitated district implementation of standards and assessments, using tools such as professional development.

Given these roles and the act's priorities on the adoption and implementation of new or revised content standards and high-quality, aligned assessments, we examined four indicators of reform at the state level. These are whether the state:

- Adopted the CCSS in mathematics and reading/English language arts;
- Was a member of a federally funded consortium developing assessments aligned to the CCSS;
- Provided, guided, or funded professional development on the CCSS; and
- Provided instructional materials or curriculum assistance for the CCSS.

We included these specific indicators because the SFSF required states receiving funds to take steps to improve the state academic-content and student-achievement standards. In addition, there were requirements and incentives in the RTT selection criteria for adopting and supporting the implementation of standards like those of the CCSS and their related assessments. For example, the RTT criteria included a measure of the extent to which the state was committed to improving the quality of its assessments, as demonstrated by whether the state was participating in a consortium of states formed to design and implement common, high-quality assessments. Aligned tests were needed because existing state tests would not necessarily be capable of assessing student mastery of the CCSS. The RTT selection criteria also encouraged the development of plans, in collaboration with districts, for the delivery of professional development and high-quality instructional materials to support the transition to and implementation of new standards and assessments. See appendix B for the components, decision rules, and specific Recovery Act requirements embodied in each indicator.

[43] No data are reported for 2009-10 because the CCSS were not yet available.

Implementation of Standards and Assessments Reforms: 2011-12

- **Forty-six SEAs reported that their states had adopted the CCSS in mathematics and reading/English language arts by 2011-12 (figure 2.1).**

- **All but two of these states (44) were members of one of the two federally funded consortia developing assessments aligned to the CCSS in 2011-12.**

- **More than 90 percent of the SEAs in states that adopted the CCSS reported supporting the implementation of the CCSS by providing professional development or instructional materials or curriculum assistance in 2011-12.**

    - Forty-five of 46 SEAs provided, guided, or funded professional development on the CCSS for the benefit of districts and schools.

    - Forty-two of 46 SEAs provided instructional materials or curriculum assistance for the CCSS.

Progress of Standards and Assessments Reforms: 2010-11 to 2011-12

- **State adoption of the CCSS and membership in a federally funded consortium developing aligned assessments increased between 2010-11 and 2011-12 (figure 2-1).**

    - The number of SEAs reporting that they adopted the CCSS in mathematics and reading/English language arts increased from 43 to 46 SEAs.

    - The number of SEAs reporting that that they were members of a federally funded consortium developing assessments aligned to the CCSS increased from 43 to 44 SEAs.

- **The school years 2010-11 through 2011-12 saw an increase in the number of SEAs reporting that they supported CCSS implementation through the provision of professional development or of instructional materials or curriculum assistance.**

    - Eight more SEAs reported that they had provided, guided, or funded professional development on the CCSS (increased from 37 to 45 SEAs).

    - Thirteen more SEAs reported that they had provided instructional materials or curriculum assistance for the CCSS (increased from 29 to 42 SEAs).

Figure 2-1. Number of state education agencies (SEAs) that implemented standards and assessments reforms: 2010-11 and 2011-12

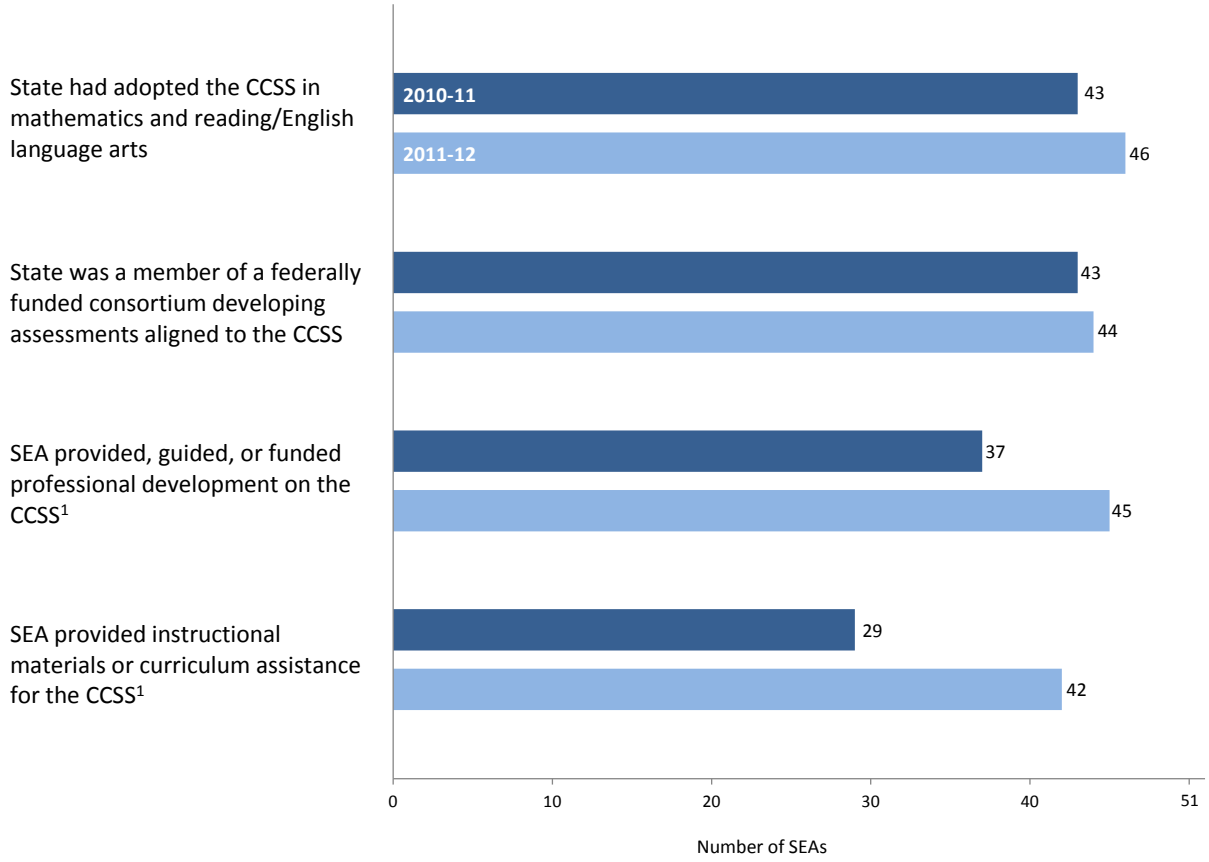


Figure Reads: Forty-three SEAs reported that in 2010-11 they had adopted Common Core State Standards (CCSS) for both mathematics and reading/English language arts. Forty-six SEAs did so by 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in 2010-11, the SEA is counted as meeting the indicator in 2011-12. See appendix A for more information about how data for previous years were used in these indicators.

Notes: Respondents include 50 states and DC. No data are reported for 2009-10 because the CCSS were not yet available.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys.

Implementation of Standards and Assessments Reforms by State RTT Status: 2011-12

Because of incentives in the RTT program encouraging states to adopt the CCSS and to participate in the development of aligned assessments, we expected that by 2011-12, a higher percentage of states that had won RTT grants would have adopted the standards and participated in the assessment consortia compared with other states. In addition, the resources available through the RTT grants could have helped to finance SEAs' provision of professional development and curriculum supports for effective implementation of these reforms.

- **All 12 SEAs in RTT states reported in 2011-12 that their state had adopted the CCSS standards in mathematics and reading/English language arts, and all were members of a federally funded consortium developing assessments aligned to the CCSS (figure 2-2).**

- **In addition, all SEAs in RTT states reported in 2011-12 that they provided, guided, or funded professional development on the CCSS and that they provided instructional materials or curriculum assistance for the CCSS.**

- **While the high participation rates of RTT states in these reforms is in line with expectations, it is noteworthy that most of the non-RTT states also were implementing these reforms in 2011-12.**

    - Thirty-four of the 39 SEAs in non-RTT states reported that their state had adopted the CCSS in mathematics and reading/English language arts.

    - Thirty-two of the 34 SEAs in non-RTT states that had adopted the CCSS reported that their state was a member of a federally funded consortium developing assessments aligned with the CCSS.

    - Thirty-three of the 34 SEAs in non-RTT states that had adopted the CCSS provided, guided, or funded professional development on the CCSS.

    - Thirty of the 34 SEAs in non-RTT states that had adopted the CCSS provided instructional materials or curriculum assistance for the CCSS.

Figure 2-2. Comparison of the implementation of standards and assessments reforms in Race to the Top (RTT) states and in other states: 2011-12

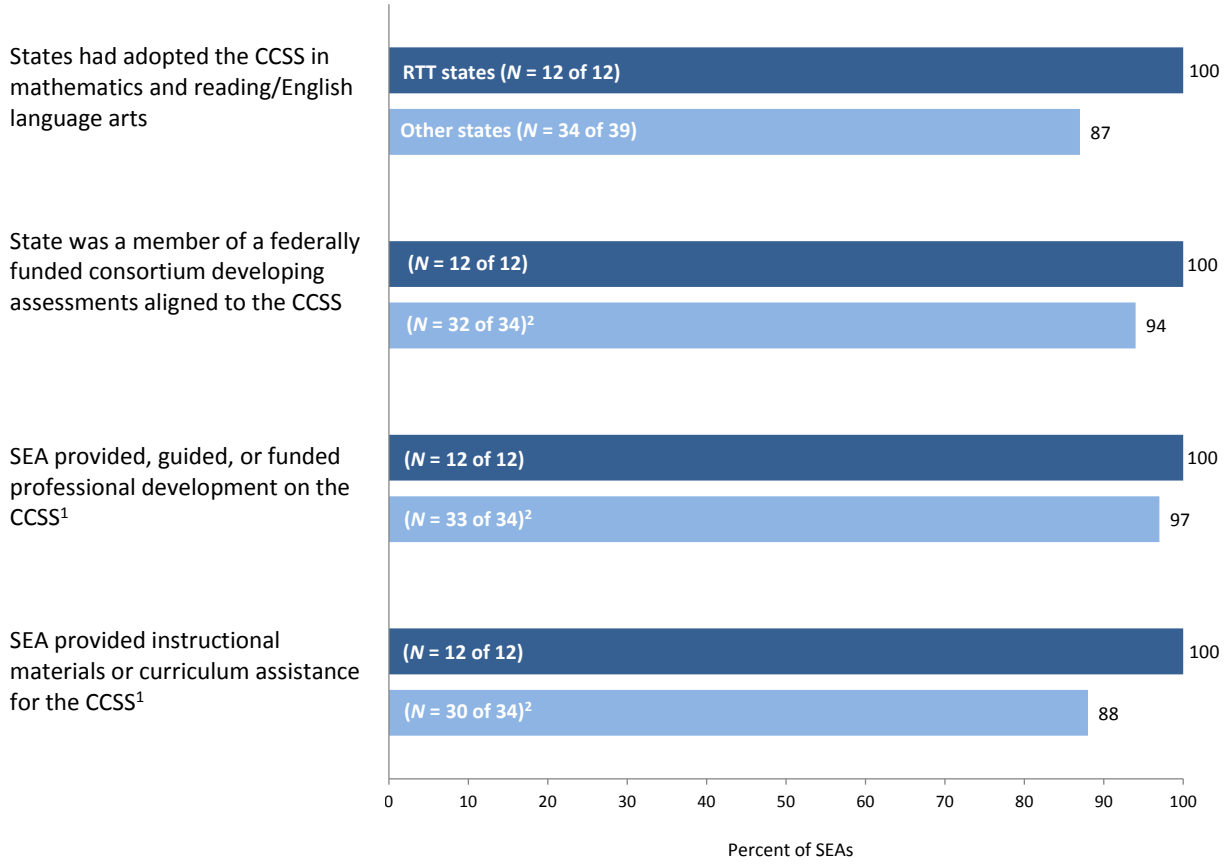


Figure Reads: All 12 state education agencies (SEAs) in RTT states reported that in 2011-12 they had adopted Common Core State Standards (CCSS) for both mathematics and reading/English language arts (100 percent). In contrast, 34 of 39 of SEAs in all other had adopted CCSS for both mathematics and reading/English language arts (87 percent).

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in 2010-11, the SEA is counted as meeting the indicator in 2011-12. See appendix A for more information about how data for previous years were used in these indicators.

[2] The denominator for the Other States percentage includes only the 34 non-RTT states that adopted the CCSS in mathematics and reading/English language arts.

Notes: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN).

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

Challenges Associated With Implementing Standards and Assessments Reforms: 2011-12

SEAs in states that had adopted the CCSS and were working to implement specific reform strategies in the area of standards and assessments were asked to report on the challenges associated with this work. Given their historical role in guiding standards-based reform, as discussed earlier, we were especially interested in challenges related to the development of and support for new aligned assessments and instructional materials. As some states had faced opposition to new standards and assessments in the past (Hadderman, 2000; Hardy, 2000), we also were interested in whether SEAs saw opposition to the CCSS as a major challenge. An SEA did not report on challenges related to a particular reform strategy if it was not implementing that strategy.

- **In 2011-12, the lack of SEA staff or expertise to provide professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards was the most frequent major challenge reported by SEAs that had adopted the CCSS (table 2-1).**

    - Sixteen of the 32 SEAs that rated this challenge perceived as a major challenge their lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards.

- **The lack of instructional materials aligned with the new or revised state content standards and lack of SEA capacity to provide support for developing these materials were also reported as major challenges by SEAs that had adopted the CCSS and that rated these challenges in 2011-12.**

    - Nineteen of the 40 SEAs that rated this challenge perceived a lack of instructional materials aligned with the new or revised content standards as a major challenge.

    - Sixteen of the 38 SEAs that rated this challenge perceived a lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing instructional materials aligned with the new or revised state content standards as a major challenge.

- **No SEAs in states that adopted the CCSS reported in 2011-12 that opposition from educators or other groups to new or revised state content standards or state assessments was a major challenge.**

Table 2-1. Number of state education agencies (SEAs) in states that adopted the Common Core State Standards (CCSS) that reported major challenges when implementing new or revised state content standards and aligned assessments: 2011-12

SEA challenge	Number of SEAs that reported challenge as a major challenge[1]	Total number of applicable SEAs[2]
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards	*16*	32
Lack of instructional materials aligned with the new or revised state content standards	*19*	40
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing instructional materials aligned with the new or revised state content standards	*16*	38
Lack of assessments to measure student mastery of the new or revised state content standards	*14*	35
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on implementing new or revised state content standards	*16*	43
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on implementing new state assessments	*9*	27
Opposition from educators or other groups to the new or revised state content standards	*0*	43
Opposition from educators or other groups to the new or revised state assessments	*0*	34

Table Reads: In 2011-12, 16 of the 32 SEAs in CCSS states rating this challenge perceived lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards as a major challenge to implementing new or revised state standards and aligned assessments.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable, SEAs that did not respond to the question, and SEAs that did not adopt the CCSS in both reading/English language arts and mathematics.

Note: Respondents include 50 states and DC.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

District-Level Findings

This section begins by describing the study's district-level indicators of reform in standards and assessments. We then use the indicators to describe districts' implementation of these reforms in 2011-12 and progress from 2010-11 to 2011-12.[44] Consistent with the emphasis on the CCSS at the state level, we focused on districts in states that had adopted the CCSS in both mathematics and reading/English language arts. Next, we compare districts in CCSS states on their awareness and implementation of these reforms in 2011-12, categorized first by district poverty status and then by enrollment size. Last, we report on the major challenges in implementing new or revised state standards and aligned assessments, as reported in 2011-12 by districts in states that had adopted the CCSS. (See appendix C for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

District-Level Reform Indicators

Districts play the central role in directing and supervising the implementation of rigorous, college- and career-ready standards and aligned assessments in schools and classrooms. Without leadership at the district level, state-adopted reforms in standards and assessments cannot drive improvements in classroom instruction and, hence, student achievement. Further, in order to ensure that their students are equipped to perform at high levels on state assessments, and to avoid state sanctions for poor performance, districts need to prepare teachers for teaching to the new standards and use aligned curricula.

Recognizing these roles, we included four indicators of reform, all of which paralleled state-level indicators in this assurance area. The indicators included whether, in 2010-11 and 2011-12, the district:

- Was aware of the state's adoption of the CCSS;
- Provided professional development on new or revised state content standards:
    - For educators who teach or mentor mathematics or reading/English language arts, and
    - On instructional strategies for teachers to help English learners or students with disabilities master the content standards; and
- Distributed instructional materials or provided selection guidance on curricula aligned with new or revised state content standards.

We included the first of these indicators because district awareness of state adoption of the CCSS signals whether the district can be expected to have taken steps toward implementation of the new standards. Indeed, the pre-conditions for implementing new standards are awareness that the standards exist and that the district has responsibilities for implementing them. This indicator also measures the effectiveness of SEAs' communication with districts about the state adoption of new standards.

[44] No data are reported for 2009-10 because the CCSS were not yet available.

We asked districts to report on whether they provided teachers with professional development focused on new or revised state content standards and associated instructional strategies both for the general student population and also for two important student subgroups, English learners and students with disabilities. Consistent with the state-level indicator, we also asked districts in CCSS states to report on their distribution of or guidance on such materials or curricula. District provision of standards-related professional development and support for curriculum guidance and materials are indicators of districts' commitment to implementing new or revised standards in classrooms.

Note that the district survey questions about implementation of state content standards were not limited to the CCSS. The surveys asked districts about the implementation of "the Common Core State Standards or other new or revised state content standards." Although the district analysis in this chapter is limited to districts in CCSS states, it is possible that districts in these states may have been thinking of new or revised standards other than the CCSS when answering the survey questions that made up the indicators.

Implementation of Standards and Assessments Reforms: 2011-12

- **In states that had adopted the CCSS, 98 percent of districts reported in 2011-12 that they were aware of their state's adoption of the CCSS (figure 2.3).**

- **Smaller percentages of districts (58 to 73 percent) supported the implementation of the standards by providing professional development or curriculum guidance/materials in 2011-12.**

    - Seventy-three percent of districts in CCSS states reported that they provided professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts.

    - Fifty-eight percent of districts in CCSS states reported that they provided professional development on new or revised state content standards and, specifically, on instructional strategies for teachers to help English learners or students with disabilities master the content standards.

    - Sixty-three percent of districts in CCSS states reported that they distributed instructional materials or provided selection guidance on curricula aligned with new or revised state content standards.

Progress of Standards and Assessments Reforms: 2010-11 to 2011-12

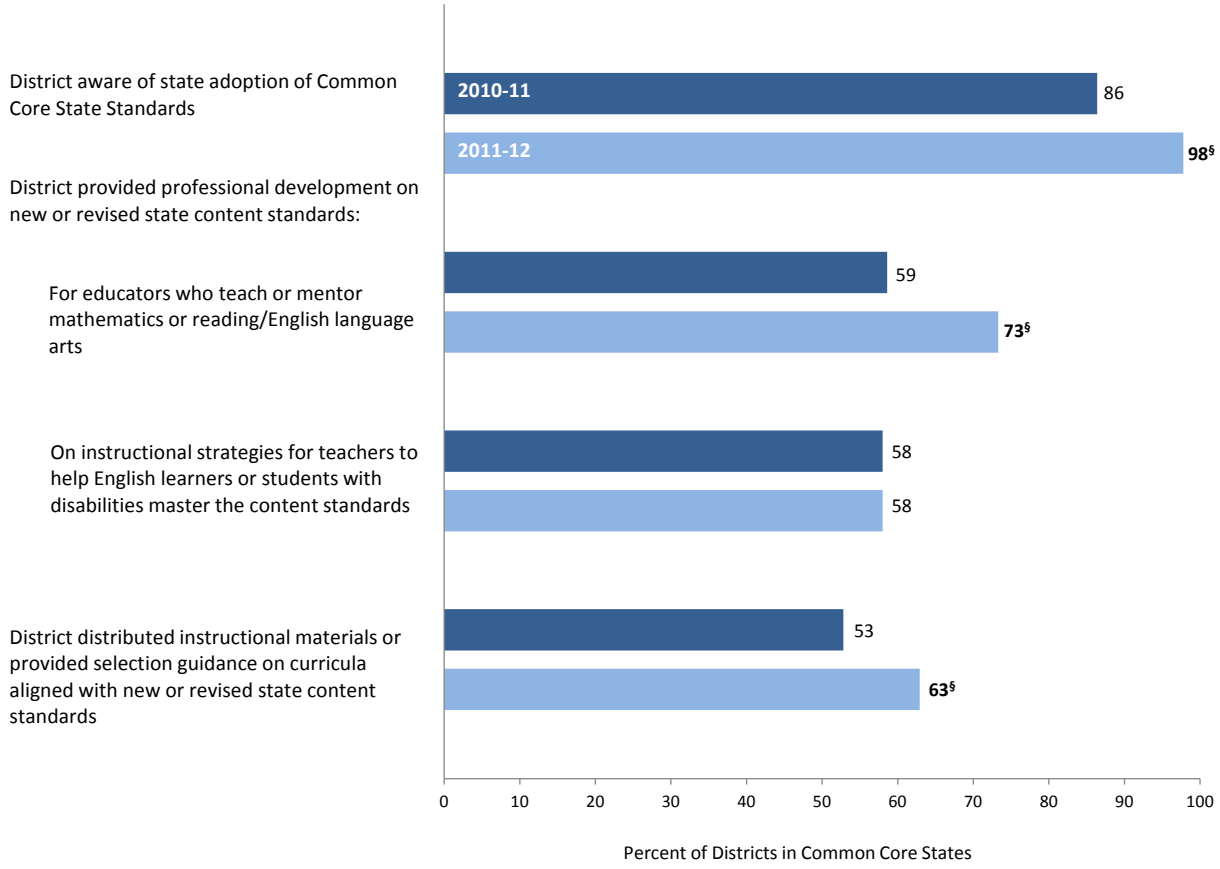
- **The percentage of districts that were aware of their state's adoption of the CCSS increased significantly from 86 percent in 2010-11 to 98 percent in 2011-12 (figure 2-3).**

- **For two of the three indicators of district support for implementing new standards, the percentage of districts reporting support increased significantly from 2010-11 to 2011-12**.

    - The percentage of districts that provided professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts increased from 59 percent to 73 percent. However, there was no change in the percentage of districts (58 percent) providing standards-related professional development on instructional strategies for teachers to help English learners or students with disabilities.

    - The percentage of districts that distributed instructional materials or provided selection guidance on curricula aligned with new or revised state content standards increased from 53 percent to 63 percent.

Figure 2-3. Percentage of districts in Common Core State Standards (CCSS) states that implemented reforms related to new or revised state standards: 2010-11 and 2011-12



§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).
Figure Reads: Eighty-six percent of districts in CCSS states reported that in 2010-11 they were aware that their state had adopted these standards. In 2011-12, 98 percent of districts in CCSS states were aware that their state had adopted these standards. The difference between the percentage for 2010-11 and the percentage for 2011-12 is statistically significant.
Notes: The percentages in the figure are cross-sectional estimates for the population of districts in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, for each year, the denominator is the estimated number of districts with sufficient data (i.e., answered enough questions to calculate the indicator) that are in the states that adopted the Common Core in mathematics and reading/English language arts as of that year. No data are reported for 2009-10 because the CCSS were not yet available. Detailed tables in appendix C provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages across indicators.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Implementation of Standards and Assessments Reforms by District Characteristics: 2011-12

Because of the long-standing focus of federal education policy on reducing poverty-related inequities, we examined the differences in reform implementation in high-poverty districts within CCSS states compared with other districts within CCSS states. We expected that high-poverty districts might be more likely than other districts to have made progress in implementing Recovery Act reforms because of their receipt of funding under federal programs that link funding to the incidence of poverty.

We also assessed differences in reform awareness and implementation among districts with varying enrollment sizes. Our hypothesis was that districts with relatively large enrollments would over time have developed greater administrative capacity to support reforms such as implementing new standards compared with districts with smaller enrollments.

District Poverty Status

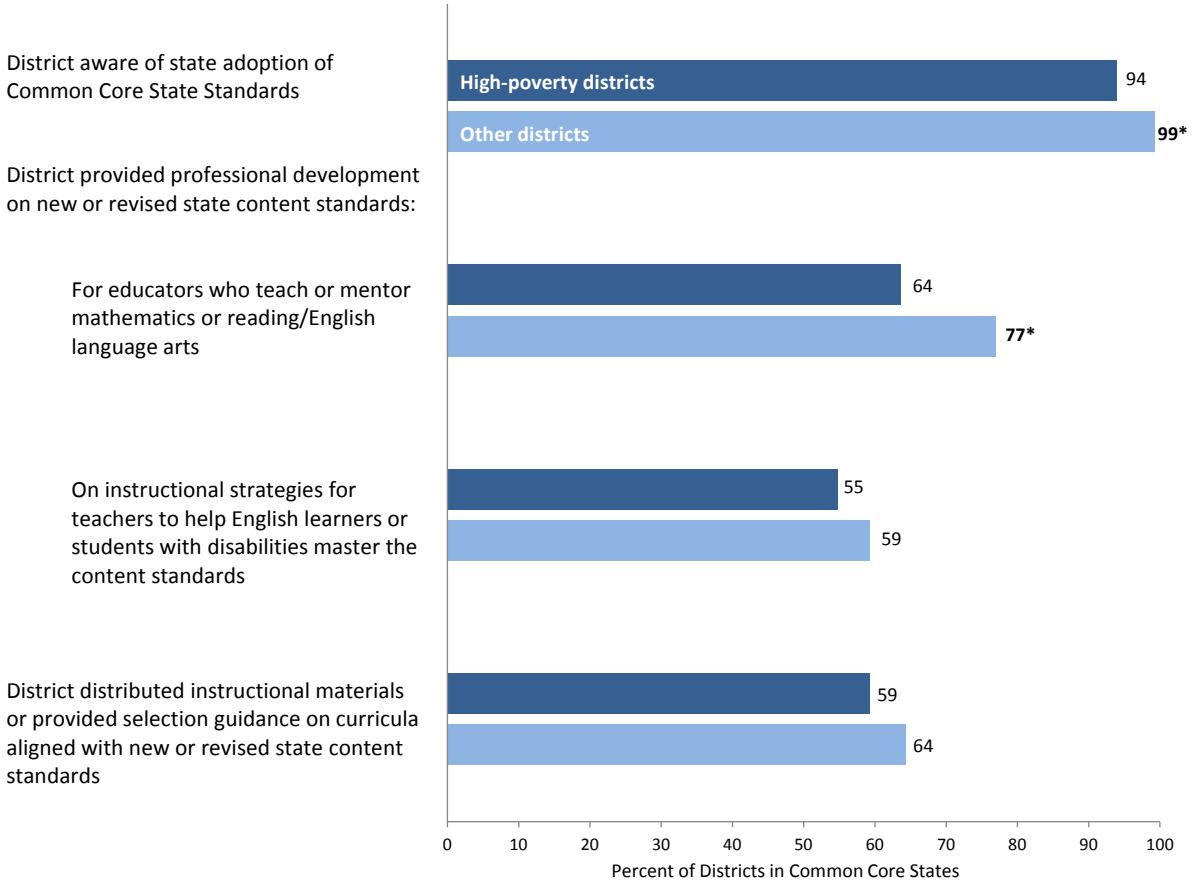
Statistically significant differences were found for two of the four indicators. However, in contrast to expectations, high-poverty districts were less likely than other districts to report reform activity.

- **In 2011-12, nearly all districts in CCSS states (regardless of poverty level) were aware of their state's adoption of these standards. Ninety-four percent of high-poverty districts compared with 99 percent of other districts were aware, a small but significant difference (figure 2-4).**

- **Sixty-four percent of high-poverty districts in CCSS states provided professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts, which is significantly lower than the 77 percent of other districts in CCSS states that provided this type of professional development.**

- **There was no significant difference in the percentages of high-poverty and other districts that reported providing professional development on instructional strategies for teachers to help English learners or students with disabilities master the content standards or distributing instructional materials or curriculum guidance aligned to new or revised standards.**

Figure 2-4. Comparison of the implementation of reforms related to new or revised state content standards in high-poverty and in other districts in Common Core State Standards (CCSS) states: 2011-12



*Percentage is significantly different from percentage for high-poverty districts ($p < .05$).

Figure Reads: Ninety-four percent of high-poverty districts in CCSS states reported that in 2011-12, they were aware that their state had adopted these standards. In contrast, 99 percent of all other districts in Common Core states reported that they were aware that their state had adopted these standards. This difference is statistically significant.

Notes: The percentages in the figure are cross-sectional estimates for the population of districts in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator for the high-poverty percentages is the estimated number of high-poverty districts (had a child poverty rate above 21.66 percent) that are in states that adopted the Common Core in mathematics and reading/English language arts as of the 2011-12 school year and have sufficient data (i.e., answered enough questions to calculate the indicator). The denominator for the other percentages is the estimated number of districts with sufficient data that had a child poverty rate at or below 21.66 percent and are in states that adopted the Common Core as of that year. Detailed tables in appendix C provide confidence intervals for each percentage.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) program, District Data for 2008 (USSD08.xls) for poverty data. Retrieved November 11, 2010, from http://www.census.gov/did/www/saipe/data/schools/index.html.

District Size

- **As expected, in states that had adopted the CCSS, large districts were significantly more likely than medium and small districts to be aware of state adoption of the CCSS and to support new standards with professional development and curriculum selection guidance and instructional materials in 2011-12 (figure 2-5).**

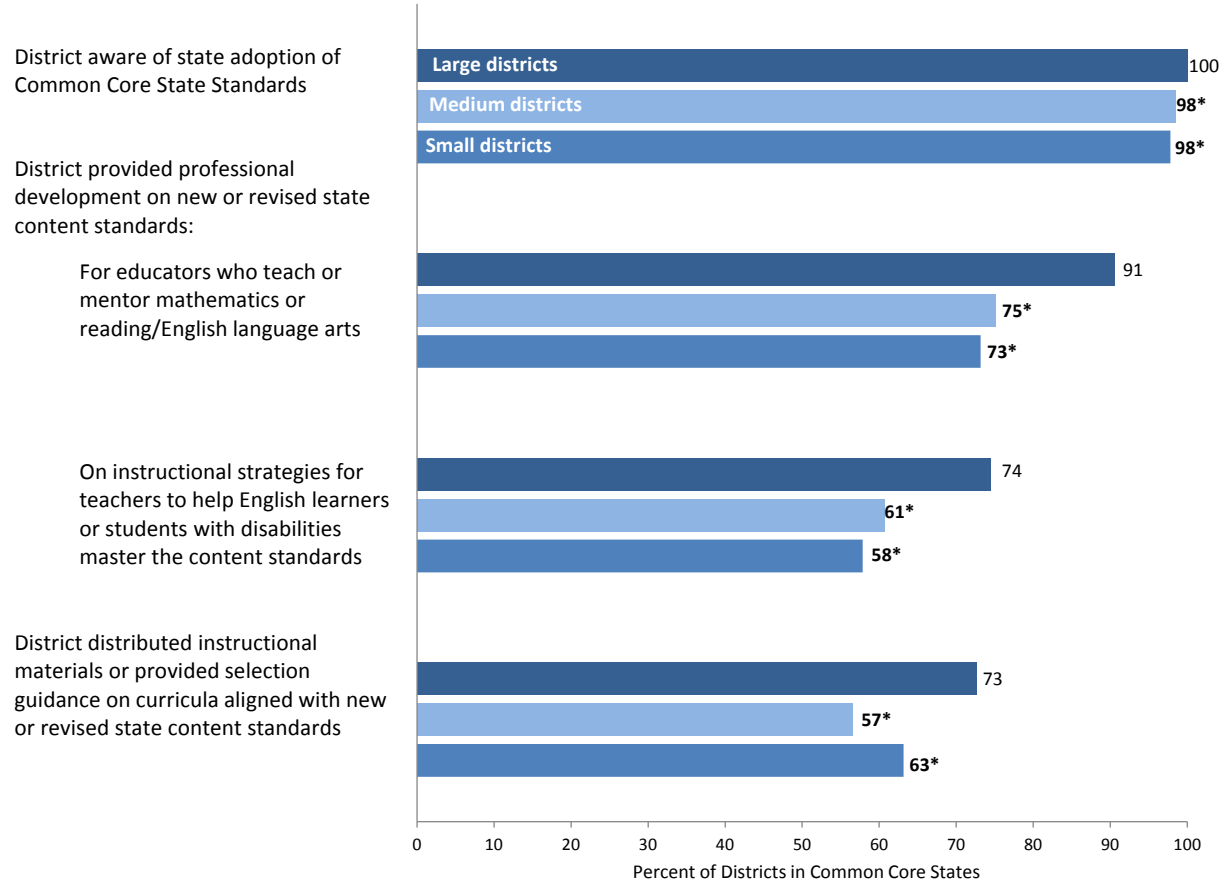
    - While nearly all districts in CCSS states were aware of their state's adoption of these standards, there were small, but significant differences, by district size. One hundred percent of large districts (at least 50,000 students) in CCSS states were aware that their state had adopted the CCSS, compared with 98 percent of medium districts (15,000 to 49,999 students) and 98 percent of small districts (14,999 students or fewer).

    - Ninety-one percent of large districts in CCSS states provided professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts. In comparison, 75 percent of medium districts and 73 percent of small districts provided this type of professional development.

    - Seventy-four percent of large districts in CCSS states provided professional development on new or revised state content standards, including strategies for teachers to help English learners or students with disabilities master the content standards. In comparison, 61 percent of medium districts and 58 percent of small districts provided this type of professional development.

    - Seventy-three percent of large districts in CCSS states distributed instructional materials or provided selection guidance on curricula aligned with new or revised state content standards. In comparison, 57 percent of medium districts and 63 percent of small districts took these actions.

Figure 2-5. Comparison of the implementation of reforms related to new or revised state content standards in large districts and in districts of other sizes in Common Core State Standards (CCSS) states: 2011-12



* Percentage is significantly different from percentage for large districts ($p < .05$).
Figure Reads: One hundred percent of large districts in CCSS states reported that in 2011-12 they were aware that their state had adopted these standards. In contrast, 98 percent of medium and small districts in Common Core states were aware that their state had adopted these standards. These differences are statistically significant.
Notes: The percentages in the figure are cross-sectional estimates for the population of districts in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator for a size group is the estimated number of districts of a given size that have sufficient data (i.e., answered enough questions to calculate the indicator) and are in states that adopted the Common Core in mathematics and reading/English language arts as of the 2011-12 school year. District size is based on the student enrollment in schools in the district. Large districts have at least 50,000 students. Medium districts have fewer than 50,000 but at least 15,000 students. Small districts have fewer than 15,000 students. Detailed tables in appendix C provide confidence intervals for each percentage.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. National Center for Education Statistics, Common Core of Data. Local Education Agency Universe Survey: School Year 2008–09 (ag081a.sas7bdat) for Enrollment Size. Retrieved August 24, 2010, from http://nces.ed.gov/ccd/pubagency.asp.

Challenges Implementing Standards and Assessments Reforms: 2011-12

Districts in states that had adopted the CCSS reported on challenges they experienced in implementing reforms related to new or revised state content standards and aligned assessments. Given their critical role in overseeing the selection and implementation of curriculum and assessments, we were especially interested in challenges they faced in these areas, as well as potential opposition to the new standards and assessments at the local level. As with SEAs, a district did not report on challenges related to a particular reform strategy if it was not implementing that strategy.

- **In CCSS states, the major challenge cited by the largest percentage of districts rating the challenge in 2011-12 was insufficient funding to purchase new instructional materials aligned with new standards, as reported by 60 percent of districts (table 2-2).**

- **Other major challenges cited by at least half of the districts centered on district needs for specific tools or resources for use in implementing the new or revised state standards and aligned assessments. Of the districts rating each challenge in 2011-12:**

    - Fifty-seven percent reported that the lack of alignment between their current assessments and the new standards was a major challenge.

    - Fifty-two percent reported that insufficient funding to support instructional specialists or coaches to help educators implement new standards was a major challenge.

- **Concerns or opposition to new standards and assessments was reported infrequently in 2011-12 as a major challenge by those rating the challenge.**

    - Concerns or opposition from school staff about additional assessments was reported as a major challenge by 22 percent of districts.

    - Concerns or opposition from school staff or staff unions to new standards was reported as a major challenge by 11 percent of districts.

    - Concerns or opposition from parents or other community groups to additional assessments was reported as a major challenge by 8 percent of districts.

    - Concerns or opposition from parents or other community groups to new standards was reported as a major challenge by 7 percent of districts.

Table 2-2. Percentage of districts in Common Core State Standards (CCSS) states that reported major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12

District challenge	Percent of districts	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Insufficient funding to purchase new instructional materials aligned with new standards	60	95
Current assessments are not aligned with the new standards	57	95
Insufficient funding to support instructional specialists or coaches to help educators implement new standards	52	93
Lack of district staff capacity or expertise to develop new curricula guides and instructional materials aligned with new standards	37	96
Inadequate quality or availability of state-developed instructional materials aligned with standards	36	94
Insufficient funding to provide adequate training to teachers on the content and use of the standards	36	96
Standardized assessments not available for enough subjects or grades	25	96
Lack of district staff capacity or expertise to provide guidance about or train educators on using new standards for their instruction	25	96
Concerns or opposition from school staff about additional assessments	22	94
Lack of clear state education agency (SEA) guidance or support on expectations concerning when and how standards should be implemented	21	94
Lack of clear SEA guidance or support on specific content of new standards	19	93
Lack of district staff capacity or expertise to provide guidance about or train educators on how to administer assessments	12	98
Concerns or opposition from school staff or staff unions to new standards	11	87

continued

Table 2-2. Percentage of districts in Common Core State Standards (CCSS) states that reported major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12 (cont'd)

District challenge	Percent of districts	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Concerns or opposition from parents or other community groups to additional assessments	8	91
Concerns or opposition from parents or other community groups to new standards	7	88

Table Reads: In 2011-12, 60 percent of the districts rating this challenge perceived insufficient funding to purchase new instructional materials aligned with new standards as a major challenge to planning or implementing new or revised state standards. Ninety-five percent of districts in CCSS states rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Districts rating the challenge excludes districts that identified the challenge as not applicable, districts that did not respond to the question, and districts in states that did not adopt the CCSS in both reading/English language arts and mathematics.

Notes: The percentages in the table are cross-sectional estimates for the population of districts in states that adopted the CCSS in mathematics and reading/English language arts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix C provide confidence intervals for each percentage and the results of significance tests for comparisons of the percentages across challenges.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

School-Level Findings

This section first describes the study's school-level indicators of reform in standards and assessments. We then use the indicators to describe schools' implementation of these reforms in 2011-12 and progress from 2010-11 to 2011-12.[45] Consistent with the SEA and district analyses, we focused on schools in states that had adopted the CCSS in both mathematics and reading/English language arts. Next, we compare the percentage of low-performing schools in which these reforms were implemented to the corresponding percentages among other schools. Last, we report on major challenges related to planning or implementing new or revised state standards and aligned assessments, as reported in 2011-12 by schools in states that had adopted the CCSS. (See appendix C for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

School-Level Reform Indicators

In order for new standards to affect what students learn, teachers need to be prepared to teach the standards, and schools need to use an aligned curriculum. At the school level, we examined three indicators that reflected these requirements and that aligned with corresponding indicators at the district and state levels. [46] At the school level, the indicators are whether:

- Teachers received professional development on new or revised state content standards;
- Teachers received professional development targeted to help English learners or students with disabilities master new or revised state content standards; and
- The school used curriculum or curriculum materials aligned with new or revised state content standards.

Implementation of Standards and Assessments Reforms: 2011-12

- **In CCSS states, two-thirds of schools or more reported in 2011-12 that they received professional development on or used curriculum materials aligned to new or revised state standards (figure 2-6).**
    - Seventy-eight percent of schools in CCSS states reported that their teachers received professional development on the new or revised state content standards.
    - Sixty-eight percent of schools in these states reported that their teachers received professional development targeted to help English learners or students with disabilities master new or revised state content standards.

[45] No data are reported for 2009-10 because the CCSS were not yet available.

[46] As with the district survey, the school survey questions about implementation of state content standards did not ask only about the CCSS. The survey asked schools about the implementation of "the Common Core State Standards or other new or revised state content standards."

- Sixty-six percent of schools in these states reported that the school used curriculum or curriculum materials aligned with new or revised state content standards.

Progress of Standards and Assessments Reforms: 2010-11 to 2011-12

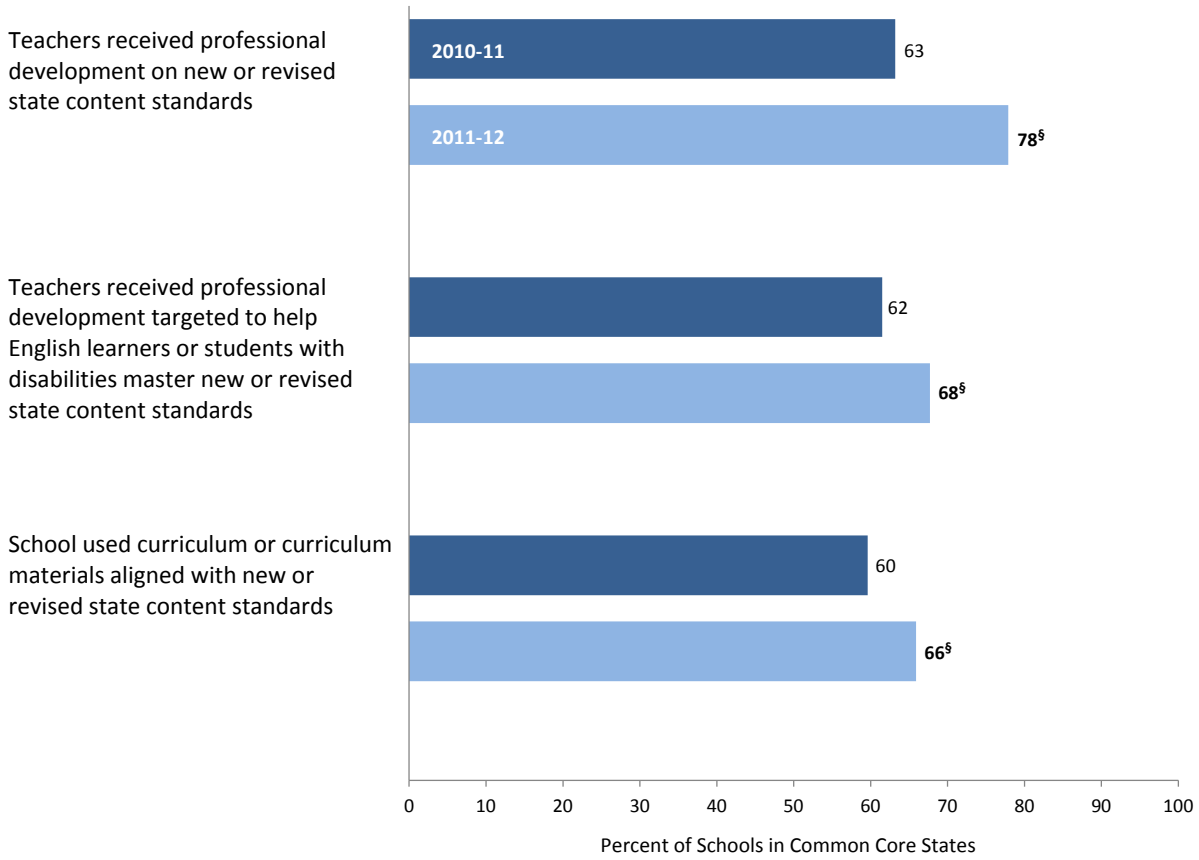
- **A significantly greater percentage of schools in CCSS states reported receiving professional development and used aligned curriculum in 2011-12 than in 2010-11 (figure 2-6)**.

  - The percentage of schools in CCSS states in which teachers received professional development on new or revised state content standards increased, from 63 percent to 78 percent.

  - The percentage of schools in CCSS states in which teachers received professional development targeted to help English learners or students with disabilities master new or revised state content standards increased, from 62 percent to 68 percent.

  - The percentage of schools in CCSS states that used curriculum or curriculum materials aligned with new or revised state content standards increased, from 60 percent to 66 percent.

Figure 2-6. Percentage of schools in Common Core State Standards (CCSS) states that implemented new or revised state standards: 2010-11 and 2011-12



§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).

Figure Reads: Sixty-three percent of schools in CCSS states reported that in 2010-11 their teachers received professional development on new or revised state content standards. In 2011-12, 78 percent of schools in CCSS states reported that their teachers received such professional development. The difference between the percentage for 2010-11 and the percentage for 2011-12 is statistically significant.

Notes: The percentages in the figure are cross-sectional estimates for the population of schools in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, for each year, the denominator is the estimated number of schools with sufficient data (i.e., answered enough questions to calculate the indicator) that are in the states that adopted the Common Core in mathematics and reading/English language arts as of that year. No data are reported for 2009-10 because the CCSS were not yet available. Detailed tables in appendix C provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages indicators.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Implementation of Standards and Assessments Reforms by School Performance Status: 2011-12

Improving the performance of students in low-performing schools is a major theme throughout the education provisions of the Recovery Act. The adoption and use of rigorous college- and career-ready standards and aligned assessments are central strategies used in the Recovery Act for achieving such improvement in low-performing schools nationwide. To assess the adoption and implementation of reforms related to standards and assessments by low-performing schools, we compared patterns of adoption and implementation in 2011-12 in low-performing schools and other schools located in CCSS states.

- **Teachers in low-performing schools in CCSS states were less likely to receive standards-related professional development than were teachers in other schools in 2011-12 (figure 2-7)**.

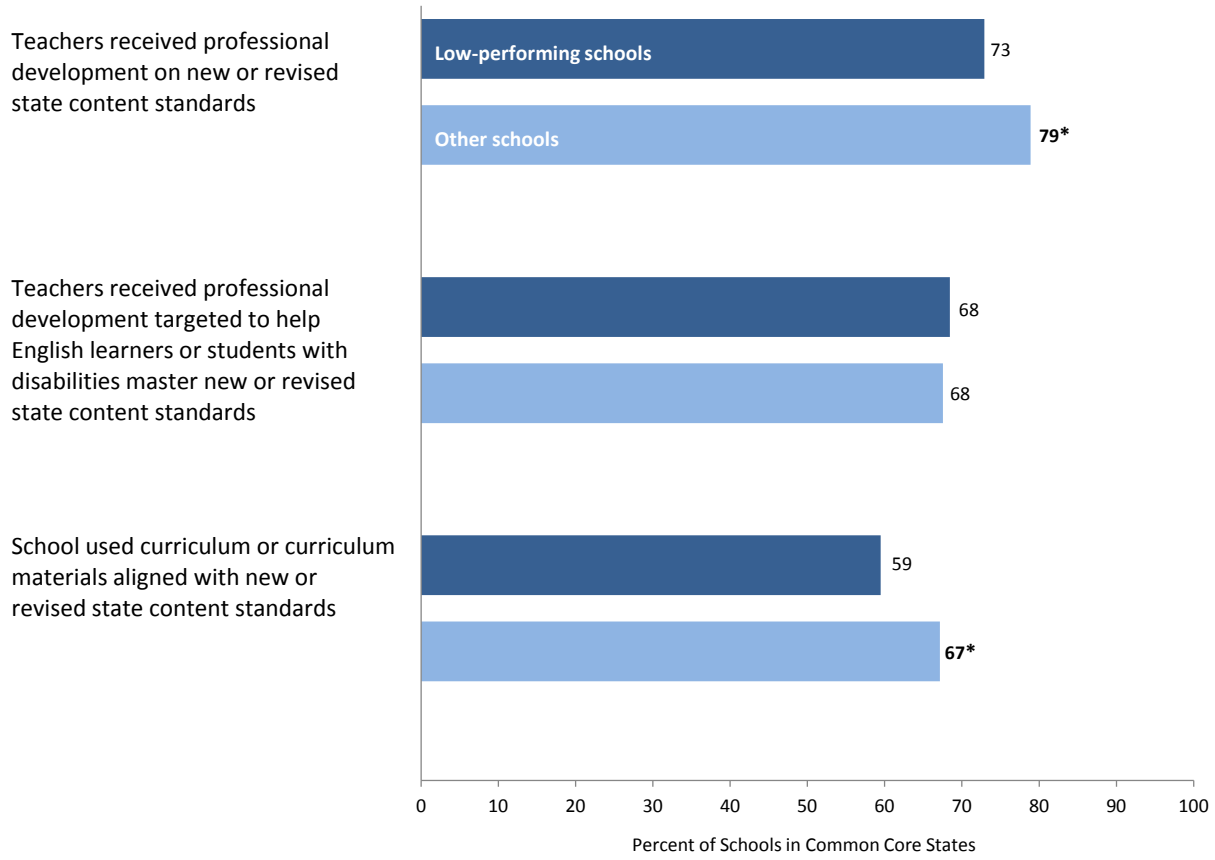
    - In 73 percent of low-performing schools in CCSS states, teachers received professional development on new or revised state content standards, compared with 79 percent of other schools in CCSS states.

- **Low-performing schools in CCSS states were also less likely to use CCSS aligned curriculum or curriculum materials than other schools in 2011-12.**

    - Fifty-nine percent of low-performing schools used curriculum or curriculum materials aligned with new or revised state content standards, compared with 67 percent of other schools in CCSS states.

- **There was no significant difference between low-performing and other schools in CCSS states in the percentage of schools reporting that teachers received professional development targeted to help English learners, or students with disabilities, master new or revised standards.**

Figure 2-7. Comparison of the implementation of new or revised state content standards in low-performing schools and in other schools in Common Core State Standards (CCSS) states: 2011-12



* Percentage is significantly different from percentage for low-performing schools ($p < .05$).
Figure Reads: Seventy-three percent of low-performing schools in CCSS states reported that in 2011-12 their teachers received professional development on new or revised state content standards. In contrast, 79 percent of all other schools in CCSS states reported that their teachers received such professional development. This difference is statistically significant.
Notes: The percentages in the figure are cross-sectional estimates for the population of schools in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator is the estimated number of schools in the performance status category (low performing, other) with sufficient data (i.e., answered enough questions to calculate the indicator) and in states that adopted the Common Core in mathematics and reading/English language arts as of the 2011-12 school year. Low-performing schools include schools that were (1) in improvement, corrective action, or restructuring; (2) identified as among the lowest-achieving schools; or (3) that have had a graduation rate below 60 percent over a number of years. Detailed tables in appendix C provide confidence intervals for each percentage.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement Grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Challenges Implementing Standards and Assessments Reforms: 2011-12

Schools were asked about the challenges they experienced when planning or implementing the new or revised state content standards and assessments. The possible challenges were similar to those we posed to districts but modified to adapt them to the school context. As with SEAs and districts, a school did not report on a challenge if it was not using the relevant reform strategy.

- **The two challenges cited most frequently as major by schools in CCSS states in 2011-12 involved insufficient funding (table 2-3). Of the schools rating the challenge:**
    - Forty-three percent reported that insufficient funding to support instructional specialists or coaches to help teachers implement new standards was a major challenge.
    - Forty-two percent reported that insufficient funding to purchase new instructional materials aligned with new standards was a major challenge.
- **Small percentages of schools in CCSS states reported that concerns or opposition from staff, parents, or other community groups was a major challenge. Of the schools rating the challenge:**
    - Concerns or opposition from school staff or staff unions about new standards was reported as a major challenge by 8 percent of schools.
    - Concerns or opposition from parents or other community groups to additional assessments was reported as a major challenge by 4 percent of schools.
    - Concerns or opposition from parents or other community groups to new standards was reported as a major challenge by 4 percent of schools.

Table 2-3. Percentage of schools in Common Core State Standards (CCSS) states that reported major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12

School challenge	Percent of schools	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Insufficient funding to support instructional specialists or coaches to help teachers implement new standards	43	84
Insufficient funding to purchase new instructional materials aligned with new standards	42	85
Current assessments are not aligned with the new standards	30	86
Inadequate quality or availability of state-developed instructional materials aligned with standards	28	86
Lack of school staff or expertise to develop new curricula guides and instructional materials aligned with new standards	25	87
Lack of school staff or expertise to provide guidance about or train educators on using new standards for their instruction	20	87
Standardized assessments not available for enough subjects or grades	16	90
Lack of clear district guidance or support on expectations concerning when and how standards should be implemented	12	86
Concerns or opposition from school staff about additional assessments	11	93
Lack of clear district guidance or support on specific content of new standards	9	86
Concerns or opposition from school staff or staff unions about new standards	8	82
Lack of school staff or expertise to train educators on how to administer assessments	6	93
Concerns or opposition from parents or other community groups to additional assessments	4	90
Concerns or opposition from parents or other community groups to new standards	4	84

Table Reads: In 2011-12, 43 percent of schools in CCSS rating this challenge perceived insufficient funding to support instructional specialists or coaches to help teachers implement new standards as a major challenge to planning or implementing new or revised state standards.

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge.

[2] Schools rating the challenge excludes schools that identified the challenge as not applicable, schools that did not respond to the question, and schools in states that did not adopt the CCSS in both reading/English language arts and mathematics.

Notes: The percentages in the table are cross-sectional estimates for the population of schools in states that adopted the CCSS in mathematics and reading/English language arts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix C provide confidence intervals for each percentage and the results of significance tests for comparisons of the percentages across challenges.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Comparisons Across Levels

In this section, we point out similarities and differences among the findings for SEAs, districts, and schools in the adoption and implementation of reforms in standards and assessments and in the major challenges experienced at each level.

Progress of Standards and Assessments Reforms: 2010-11 to 2011-12

In most states, SEAs have primary responsibility for educational decisions regarding the adoption and implementation of changes in statewide standards and assessments. Districts and schools generally begin to implement after states adopt standards and provide guidance. Because of this, we expected that implementation might vary across the SEA, district, and school levels.

- **More SEAs and higher percentages of districts and schools in CCSS states supported implementation of new standards by providing professional development and curriculum assistance in 2011-12 when compared with 2010-11 (figures 2-1, 2-3, and 2-6).**

    - The number of SEAs reporting that they provided, guided, or funded professional development on the CCSS increased from 37 to 45, while the percentage of districts in CCSS states that reported providing professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts increased from 59 percent to 73 percent. The percentage of schools in CCSS states reporting teachers received professional development on new or revised state content standards increased from 63 percent to 78 percent.

    - However, while the percentage of schools in CCSS states reporting that their teachers received professional development targeted to help English learners or students with disabilities master new or revised state content standards increased from 62 to 68 percent, there was no significant increase in the percentage of districts reporting that they provided such professional development.

    - The number of SEAs reporting that they provided instructional materials or curriculum assistance for the CCSS increased from 29 to 42, while the percentage of districts reporting that they distributed instructional materials or provided guidance on curricula aligned with new or revised state content standards increased from 53 percent to 63 percent, and the percentage of schools reporting using aligned materials increased from 60 to 66 percent.

Challenges Associated With Implementing Standards and Assessments Reforms: 2011-12

Because of their different roles in educational governance and delivery, educators at state, district, and school levels are likely to experience somewhat different challenges in achieving sought-after reforms. In the area of reform in standards and assessments, however, two challenges were ranked very highly across the three levels of education governance.

- **A lack of curriculum and instructional materials aligned with new standards was a prevailing challenge across SEAs, districts, and schools in CCSS states in 2011-12 (tables 2-1, 2-2, and 2-3)**. **This challenge was reported most frequently or second most frequently across the three levels.**

    - Nineteen of the 40 SEAs in CCSS states rating this challenge reported that a lack of instructional materials aligned with new or revised state content standards was a major challenge.

    - Sixty percent of districts in CCSS states reported that insufficient funding to purchase new instructional materials aligned with the new standards was a major challenge.

    - Forty-two percent of schools in CCSS states reported that insufficient funding to purchase new instructional materials aligned with new standards was a major challenge.

- **An area with few reports of major challenges in 2011-12 was the concerns or possible opposition of staff, staff unions, parents, or others regarding the adoption and implementation of improved standards and assessments**.

    - No SEAs in CCSS states reported that such opposition was a major challenge.

    - Among districts in CCSS states, 22 percent or less reported that concerns or opposition from school staff, staff unions, parents, or other community groups about the implementation of new standards and assessments was a major challenge.

    - Among schools in CCSS states, 11 percent or less reported that such concerns were a major challenge.

This page intentionally blank.

Chapter 3: Data Systems

Many of the Recovery Act's programs provided incentives to ensure that teachers, schools, districts, SEAs and other stakeholders have information about individual student outcomes, from early childhood through higher education and workforce entry, to drive educational improvement. Developing longitudinal data systems that include a set of 12 core elements, providing training on these systems, and encouraging data access and use were requirements or state selection criteria for the SFSF and RTT programs, and the supplemental Recovery Act funding for the SLDS program. These data systems and the access and use of their data are also key to implementing reforms in the act's other assurance areas. Planning and differentiating instruction, monitoring school and educator performance, promoting the equitable distribution of effective teachers, and evaluating the success of educational interventions all require collection of and access to comprehensive student as well as teacher data.

The collection and use of student assessment data are fundamental to standards-based education reform, as envisioned by NCLB. These assessments are central to educational accountability, and state data systems provide the basic infrastructure for the use of student assessment results. The Education Technical Assistance Act of 2002 authorized competitive SLDS grants to enable states to "design, develop, and implement statewide, longitudinal data systems to efficiently and accurately manage, analyze, disaggregate and use individual student data, consistent with ESEA" including the reporting and use of student assessment data. In 2005, the U.S. Department of Education awarded its first round of the SLDS grants. Between 2005 and 2009, 41 states and the District of Columbia received an SLDS grant, and some received more than one. In 2007, the America COMPETES Act (P.L. 110-69) also encouraged improvements to state education data systems by identifying 12 core components for such systems (e.g., statewide unique student identifiers; the ability to link students with demographic, attendance, course taking, and performance data; the ability to link student teacher data.)[47]

Data use by educators to plan, differentiate, and assess the effectiveness of instruction is considered an important strategy for improving instruction and consequently student learning (Feldman and Tung, 2001; Fuchs, Deno, and Mirkin, 1984; Hamilton, Halverson, What Works Clearinghouse, et al., 2009). Since 2006, the TIF program, by requiring that the achievement growth of individual teachers' students be used for educator evaluation and performance-based compensation, has encouraged districts to track student achievement growth for individual teachers.

These data system components specified in the America COMPETES Act were the foundation of the Recovery Act's requirement for longitudinal data systems that support the other three assurance areas and were a condition for receiving SLDS grants funded by the act. States also were required to commit to establish data systems that include these core system components to receive funds from the SFSF. For RTT, states had to demonstrate the extent to which their statewide longitudinal system included all 12 components. The Recovery Act provided additional support to 20 states that previously received SLDS grants. The Recovery Act also funneled an additional $200 million to the TIF program. A core element for TIF-funded performance-based compensation systems is a data system that can link

[47] The 12 components include: use of unique student identifiers; student-level enrollment, demographic, and program participation information; exit drop out, transfer, and completion information for P-16 programs; communication with higher education data systems; assessing data quality, validity, and reliability; yearly test records; information on students not tested; teacher identification systems that allow linking to students; student-level transcript information; college readiness test scores; information on students' transition from high school to postsecondary institutions; and other information to determine alignment and preparedness for success in postsecondary education.

student achievement data to teacher and principal payroll and human resources systems. TIF allowed grant funds to be used for developing these data systems.

In addition to building comprehensive data systems, the Recovery Act programs encouraged states to promote data access and use and included incentives for districts and schools to use data. The goal of data access and use also build on prior initiatives, including SLDS and TIF. States applying for RTT were required to demonstrate how they would make statewide longitudinal data accessible to key stakeholders and how the state would support districts in using data to improve instruction. At the district and school levels, Recovery Act programs also provided new incentives for some districts and schools to track and use data, especially student assessment results. For example, to receive a share of the $3 billion Recovery Act funds for SIG, districts had to commit to implementing specific intervention models in their lowest-performing schools. Two of the four SIG school intervention models included the use of student data to inform and differentiate instruction, and encouraging evaluation of educators based on student growth is part of a third SIG model.

Taking the strategy of using data in instructional decisions to scale depends on providing educators with access to assessment results and training educators in assessment data interpretation and use, which are both actions promoted by the Recovery Act. To provide a picture of the prevalence and progress of the data system reforms promoted by the act, we identified and examined indicators of reform at the state, district, and school levels.

Key Findings Across Levels

- **While more SEAs facilitated access to assessment data and provided professional development or technical assistance on their use in 2011-12 than 2009-10, there was no corresponding district trend. However, a significantly larger percentage of schools reported in 2011-12 than in 2009-10 that teachers had online access to student assessment results and used student assessment data to identify students for additional support or to tailor instruction (figures 3.1, 3.3, 3.6).**

- **At both the district and school levels, the two challenges most frequently rated as major were delays in transmission of assessment results to schools or teachers (rated as a major challenge by 35 percent of districts and 21 percent of schools) and insufficient funding to support data systems that store and provide access to assessment information (rated as a major challenge by 33 percent of districts and 18 percent of schools) (tables 3.2 and 3.3).**

Using these indicators, this chapter describes the prevalence and progress of state, district, and school implementation or support for implementation of Recovery Act reforms aimed at the development, training, and use of data systems. We also report on the major challenges to implementing these reforms as perceived by survey respondents at each level. We also examine whether the prevalence of reform during the final year of the study varied by key state, district, and school characteristics. For states, we compare implementation by those states awarded RTT grants and all other states. For districts, we compare reform implementation by district poverty status and district enrollment size. For schools, we compare those that are low performing with all other schools. We conclude the chapter with a comparison of progress across levels.[48]

State-Level Findings

In this section, we first describe the study's state-level indicators of reform related to data systems. We then use the indicators to describe SEAs' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Next, we report on whether a greater percentage of RTT states implemented data system reforms in 2011-12 compared with states that did not receive RTT grants. Last, we conclude this section with a report of the major challenges using data to support reform, as reported in 2011-12 by SEAs.

State-Level Reform Indicators

Given states' leadership in designing and implementing data systems, the act's emphasis on the importance of robust data systems, and specific programs promoting data access and use, we examined four indicators at the state level. These are whether:

- The state operated a longitudinal data system that contained the 12 core components of a longitudinal education data system identified in the America COMPETES Act;
- The state's longitudinal data system had the ability to link teachers to student data;
- The SEA facilitated educators' access to assessment data; and
- The SEA provided professional development or technical assistance to support educators' use of assessment data.

We included the first two indicators because, as noted above, a data system including all 12 components identified in the America COMPETES Act was one of the selection criteria in the RTT competition, and states were required by SFSF to report on which of these components were included in their longitudinal data systems. Particularly important among the 12 components is the capacity to link teacher and student data. The linking of these data is a prerequisite for using student growth to evaluate teachers and provide performance-based compensation, as promoted by the provisions of RTT and TIF intended to improve the quality of the educator workforce.

[48] This chapter does not include a comparison of challenges across the SEA, district, and school levels as there are no directly comparable challenges common to all three levels.

We included the last two indicators because data access and professional development on its use are the first steps in helping educators make use of student data. In addition, RTT selection criteria included having plans for supporting LEAs and schools in providing educators with information they need to inform and improve their instructional practices, decision-making, and overall effectiveness. The selection criteria also included having plans for using data by providing professional development to teachers, principals, and administrators on how to use data systems and the data they contain to support instructional improvement. See appendix B for the components, decision rules, and specific Recovery Act requirements embodied in each indicator.

Implementation of Data Systems Reforms: 2011-12

- **In 2011-12, most SEAs reported that they provided educators with assistance in data access and use (45 to 47 SEAs, figure 3-1).**
    - Forty-five SEAs reported that they facilitated educators' access to assessment data.
    - Forty-seven SEAs reported that they provided professional development or technical assistance to support educators' use of assessment data.
- **The latest data available show that in 2010-11, 30 SEAs reported that their state data systems had the ability to link teachers to student data, and 13 reported having a longitudinal data system that contained the 12 core components of a longitudinal education data system as identified in the America COMPETES Act.[49]**

Progress of Data Systems Reforms: 2009-10 to 2011-12

- **Many SEAs reported that they were already providing assistance in data access (35 states) and use (32 states) in 2009-10, and numbers increased from 2009-10 to 2011-12 (figure 3-1).[50]**
    - Ten more SEAs reported that they facilitated educators' access to assessment data (increased from 35 to 45 SEAs).
    - Fifteen more SEAs reported that they provided professional development or technical assistance to support educators' use of assessment data (increased from 32 to 47 SEAs).

[49] Data about the status of these indicators in 2011-12 were not available from the U.S. Department of Education.

[50] Because the indicator of states providing professional development or technical assistance measures activities that may remain in effect across years, SEAs that reported reforms in this area in either of the previous years were considered as continuing the activity in 2011-12.

Figure 3-1. Number of state education agencies (SEAs) that implemented data system reforms: 2009-10, 2010-11, and 2011-12

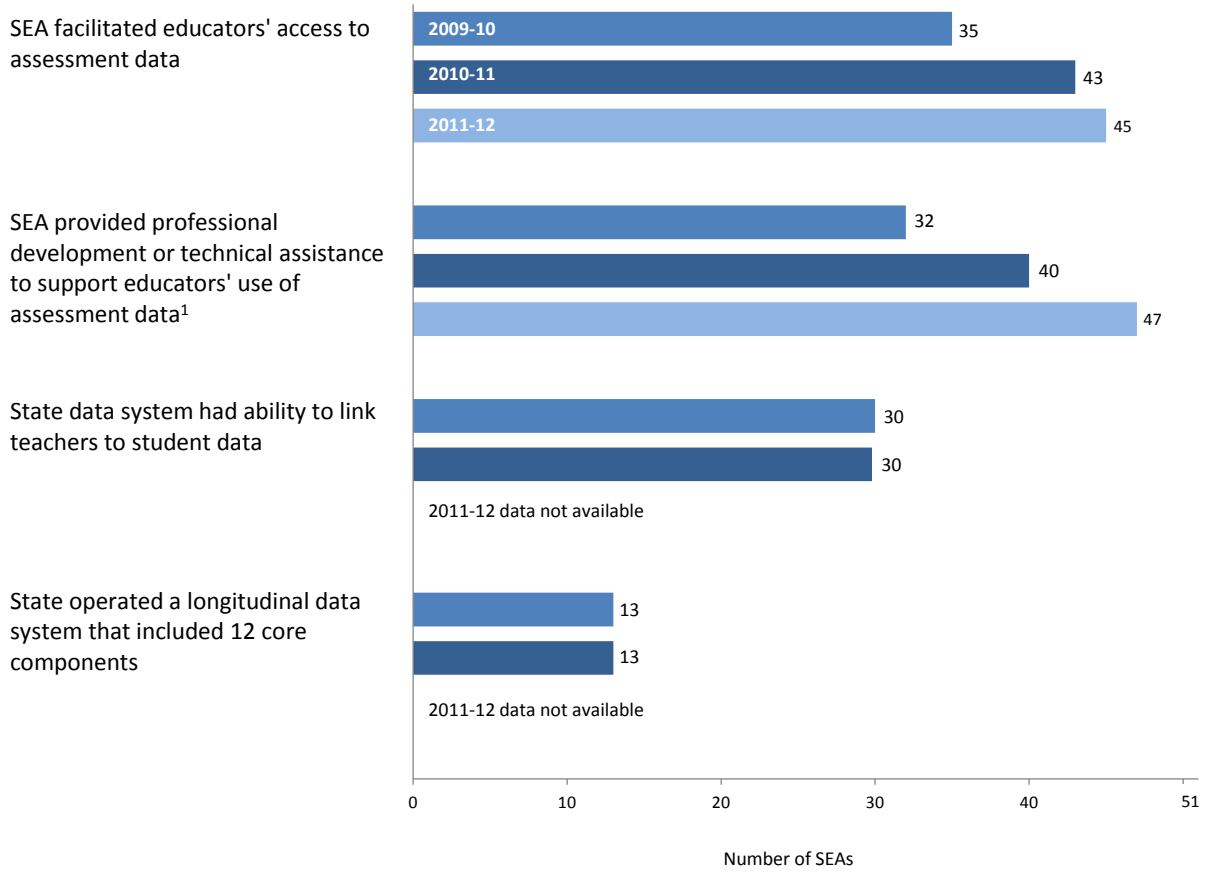


Figure Reads: Thirty-five SEAs reported that in 2009-10 they facilitated educators' access to assessment data. Forty-three SEAs did so in 2010-11, and 45 did so in 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years. See appendix A for more information about how data for previous years were used in these indicators.

Note: Respondents include 50 states and DC.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys for information on educators' access to assessment data and professional development or technical assistance to support the use of assessment data. U.S. Department of Education, State Fiscal Stabilization Fund Initial Annual State Reports (2009-10) and Amended Applications (2010-11) for information on comprehensive data systems. States' status on the core components for 2011-12 was not available from the U.S. Department of Education.

Implementation of Data Systems Reforms by State RTT Status: 2011-12

Because the RTT program provided additional incentives and resources for states to develop data systems and to plan for data access and use by educators, we expected that by 2011-12, a higher percentage of states that had won RTT grants would have implemented the data systems reforms we examined compared with other states. As noted previously, this report does not examine the relationship between amount of Recovery Act funding (including RTT funding) and reform implementation.

- **Although high percentages of non-RTT states (87 to 90 percent)implemented these reforms in 2011-12, SEAs in RTT-winning states, as expected, were more likely than SEAs in other states to assist in educators' data access and use (figure 3-2).**

    - Eleven of the 12 SEAs in RTT-winning states reported that they facilitated educators' access to assessment data compared with 34 of the 39 SEAs in the other states.

    - All 12 SEAs in RTT-winning states reported that they provided professional development or technical assistance to support educators' use of assessment data compared with 35 of the 39 SEAs in other states.

Figure 3-2. Comparison of the implementation of data system reforms in Race to the Top (RTT) states and in other states: 2011-12

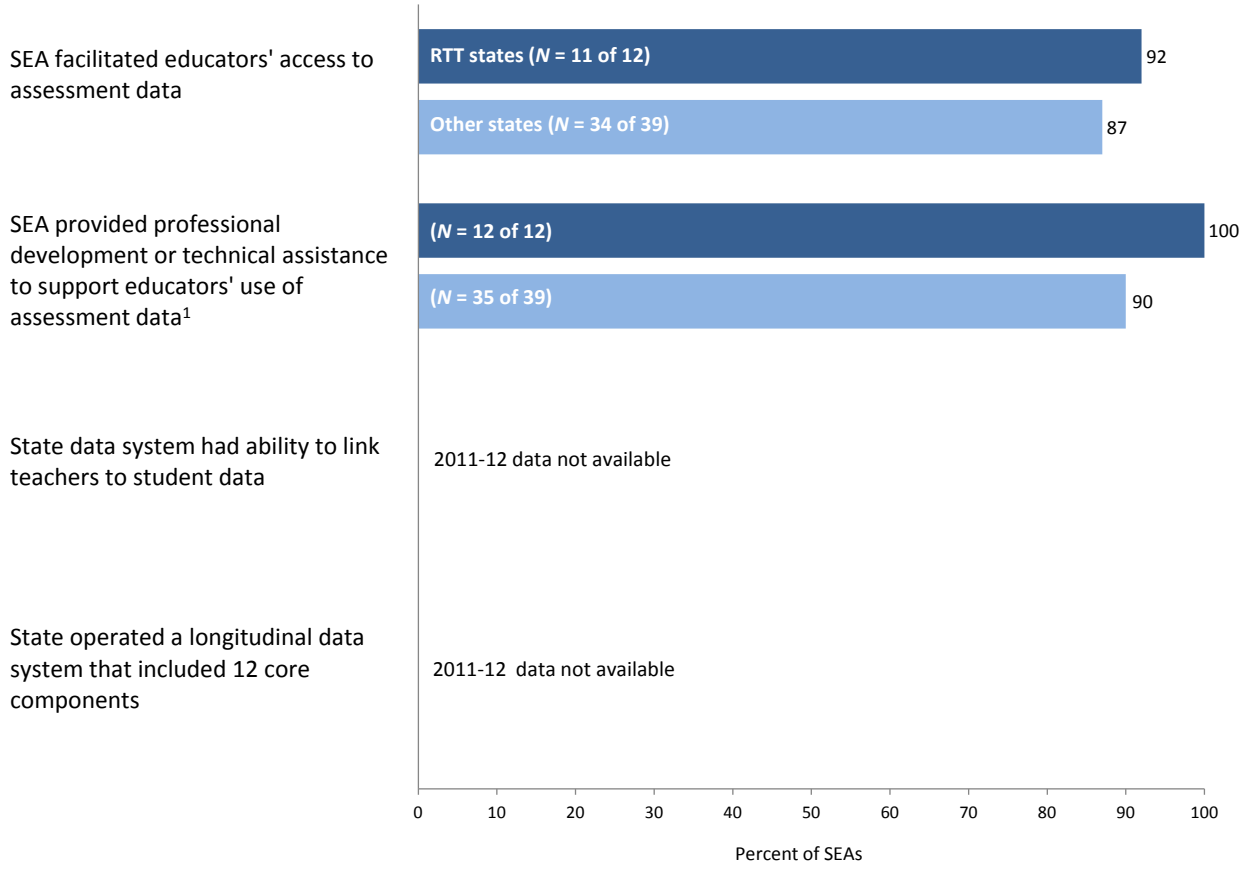


Figure Reads: Eleven of the 12 SEAs in RTT states reported that in 2011-12 they facilitated educators' access to assessment data (92 percent). In contrast, 34 of 39 SEAs in other states had provided such access (87 percent).

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years. See appendix A for more information about how data for previous years were used in these indicators.

Notes: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN).

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey. States' state status on the core components for 2011-12 was not available from the U.S. Department of Education.

Challenges Associated With Implementing Data Systems Reforms: 2011-12

SEAs were asked about challenges they encountered in linking students and teachers, providing access to, and supporting educators' use of data. An SEA did not report on challenges related to a particular reform strategy if it was not implementing that strategy.

- **Challenges related to linking student data to individual teachers were the most frequent major challenges reported by SEAs in 2011-12 (table 3-1).**
    - Fourteen of the 42 SEAs rating this challenge perceived restrictions in rules and regulations on linking of student data to individual teachers as a major challenge.
    - Fifteen of the 48 SEAs rating this challenge perceived that current data systems make linking student test data to individual teachers difficult as a major challenge.
- **The challenge least frequently reported as major was that current data systems limit LEA and school access to new assessment data.**
    - Seven of the 38 SEAs rating this challenge perceived it as a major challenge.

Table 3-1. Number of state education agencies (SEAs) that reported major challenges using data to support reform: 2011-12

SEA challenge	Number of SEAs that reported challenge as a major challenge[1]	Total number of applicable SEAs[2]
Restrictions in rules and regulations on linking of student data to individual teachers	*14*	42
Current data systems make:		
Linking student test data to individual teachers difficult	*15*	48
Tracking the success of school improvement efforts at the student level difficult	*12*	51
Current data systems limit LEA and school access to new assessment data	*7*	38
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on accessing and using assessment data	*9*	42

Table Reads: In 2011-12, 14 of the 42 SEAs rating this challenge perceived restrictions in rules and regulations on linking of student data to individual teachers as a major challenge to using data to support reform.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable and SEAs that did not respond to the question.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

District-Level Findings

This section begins by describing the study's district-level indicators of reform related to educators' access to and use of student assessment data and the use of assessment data to track student achievement gains for individual teachers. We then use the indicators to describe districts' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Next, we compare the percentage of districts implementing these reforms in 2011-12, first by district poverty level and then by enrollment size. Last, we conclude this section with a report of the major challenges related to access and use of assessment data, as reported in 2011-12 by districts. *(*See appendix D for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

District Reform Indicators

Districts, as employers of educators, are likely to control access to student data and be primarily responsible for training educators to use it. The RTT program and Recovery Act funds for TIF provided incentives to promote data use within districts. At the district level, we examined three indicators of reform related to the data systems priorities of the Recovery Act:

- Whether the district provided educators with access to assessment data;
- Whether the district provided educators with professional development on the use of assessment data for instructional planning; and
- Whether the district used longitudinal data to track student achievement gains for individual teachers.

We included the first two indicators because RTT selection criteria envisioned that states and districts would partner to provide educators with information to improve instruction and professional development on how to use data systems and data. We included whether districts used longitudinal student assessment data to track student achievement gains for individual teachers because districts are in the key position to use this information for personnel decisions, for designing professional development, and for assessing the impact of initiatives aimed at improving instruction. The TIF program also required districts to use longitudinal data to measure student growth for use in teacher evaluation systems.

Implementation of Data Systems Reforms: 2011-12

- **At least 80 percent of districts reported that in 2011-12 they provided educators with access to assessment data and assistance with data use (figure 3-3).**

    - Eighty-nine percent of districts reported that they provided educators with access to assessment data.

    - Eighty percent of districts reported that they provided educators with professional development on the use of assessment data for instructional planning.

- **Sixty-six percent of districts reported that they used longitudinal data to track student achievement gains for individual teachers in 2011-12.**

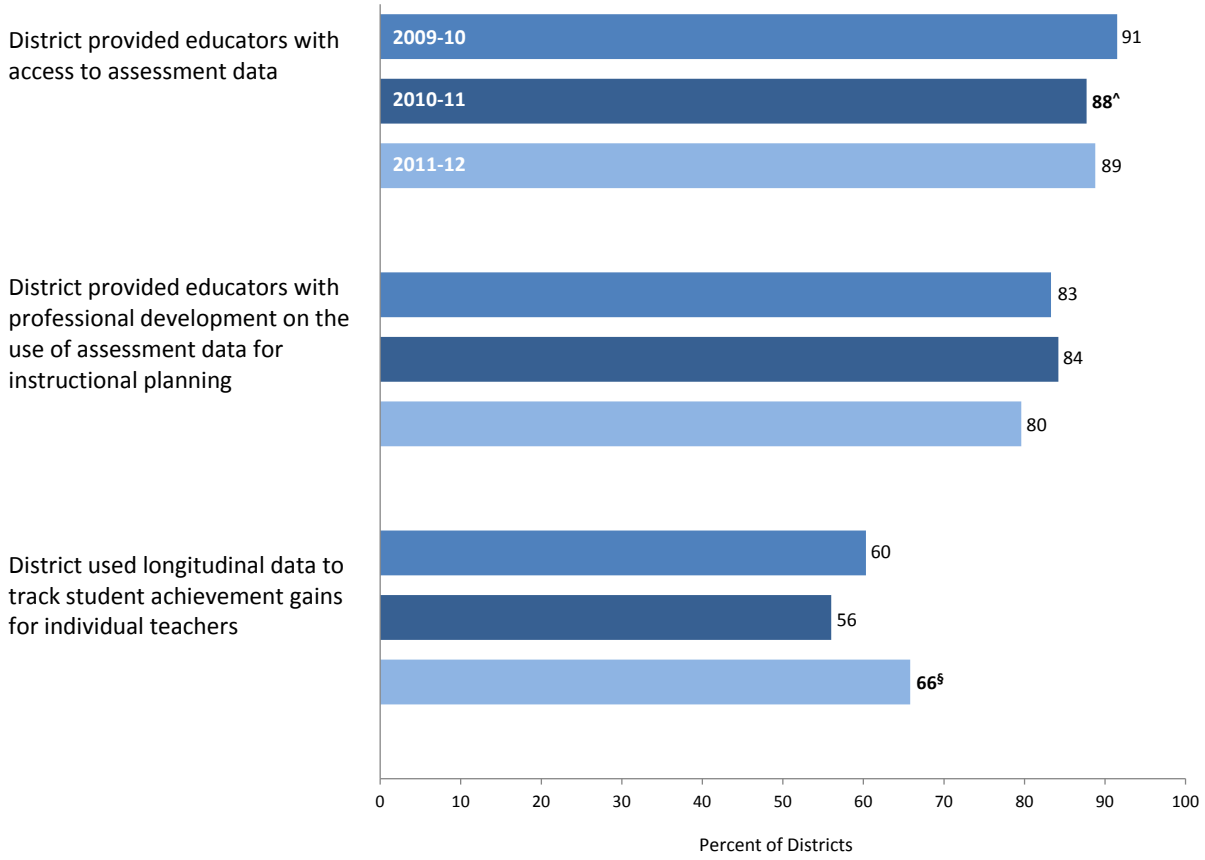
Progress of Data Systems Reforms: 2009-10 to 2011-12

- High percentages of districts were already implementing reforms in providing educators with access to assessment data and professional development on data use for instructional planning in 2009-10, and there was no increase from 2009-10 to 2011-12.

- **For only one reform (used longitudinal data to track student achievement gains for individual teachers) was there a significant increase from 2009-10 to 2011-12 in the percentage of districts implementing (figure 3-3).**

    - A higher percentage of districts used longitudinal data to track student achievement gains for individual teachers in 2011-12 than did so in 2009-10 (66 percent compared with 60 percent).

Figure 3-3. Percentage of districts that supported reforms related to educators' use of student data: 2009-10, 2010-11, and 2011-12



^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).

Figure Reads: Ninety-one percent of districts reported that they provided educators with access to assessment data in 2009-10. In 2010-11, 88 percent of districts reported that they provided educators with access to assessment data and 89 percent of districts did so in 2011-12. The difference between the percentage for 2010-11 and the percentage for 2009-10 is statistically significant.

Notes: The percentages in the figure are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator for the percentages is the estimated number of districts with sufficient data (i.e., answered enough questions to calculate the indicator). Detailed tables in appendix D provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages across indicators.

For 2010-11 and 2011-12, districts were asked whether they used or included the strategy in all schools, some schools, or if they were not using the strategy, whether they were actively planning its use or had no plans to use or include the strategy. Only districts that reported that they used or included the strategy in all or some schools were counted as meeting the indicator. For the 2009-10 school year, the response options included only Yes and No, and only those districts that responded Yes were counted as meeting the indicator.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Implementation of Data Systems Reforms by District Characteristics: 2011-12

Because of the long-standing focus of federal education policy on reducing poverty-related inequities, we examined the differences in reform implementation in high-poverty districts compared with other districts. We expected that high-poverty districts might be more likely than other districts to have made progress in implementing Recovery Act reforms because of their receipt of funding under federal programs that link funding to the incidence of poverty. In addition, training teachers in Title I schools on the use of data to inform and improve instruction was also an allowable use of additional Title I funds under the Recovery Act. High-poverty districts may also have more federal resources to use for data coordinators and data use training.

We also examined differences in reform implementation to support data access and use by educators among districts with varying enrollment sizes. Our hypothesis was that districts with relatively large enrollments would over time have developed greater administrative capacity to support the data access and use reforms we examined compared with districts with smaller enrollments. In addition, larger districts may also have developed their own data systems independently of their SEAs.

District Poverty Status

- **There were no statistically significant differences in the percentage of high-poverty and other districts supporting reforms in 2011-12 related to educators' use of data (figure 3-4).**

Figure 3-4. Comparison of the support for reforms related to educators' use of student data in high-poverty districts and in other districts: 2011-12

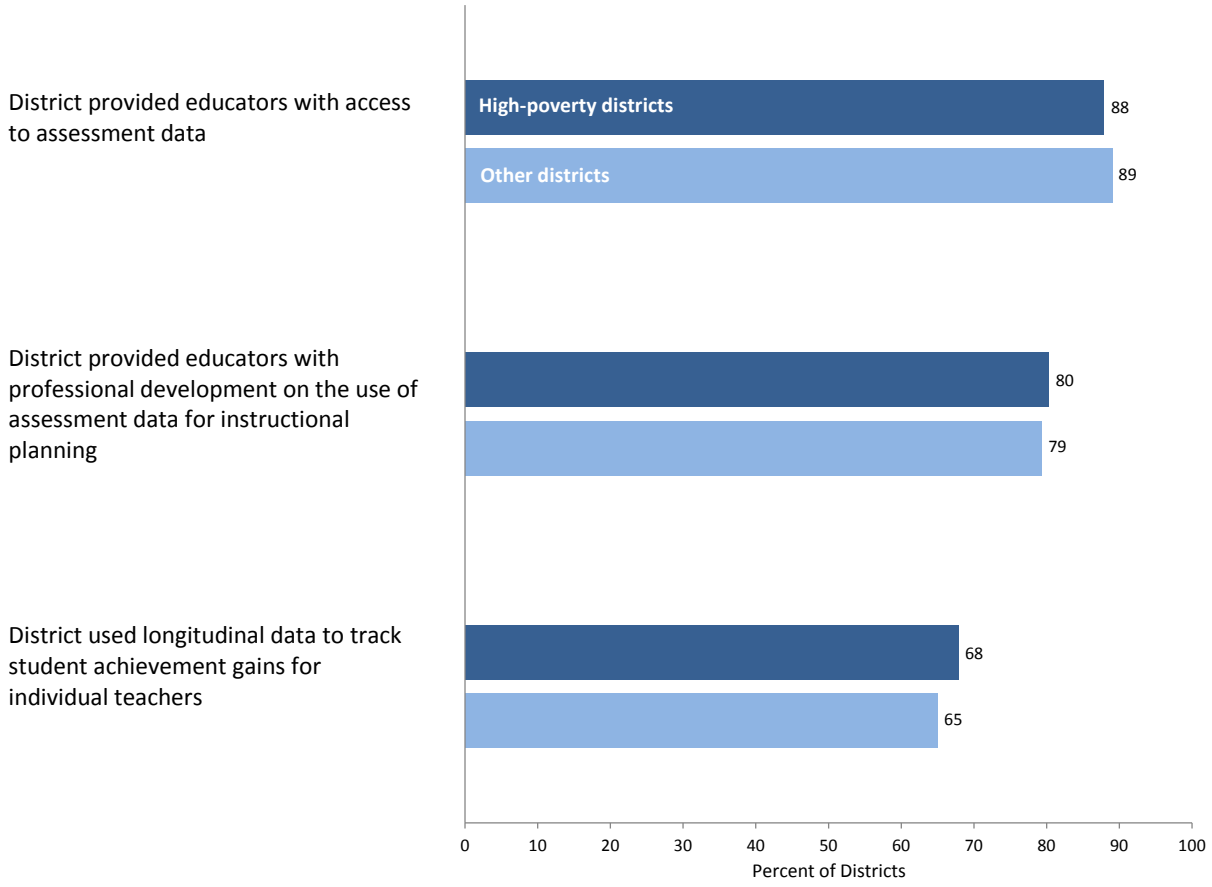


Figure Reads: Eighty-eight percent of high-poverty districts and 89 percent of all other districts reported that they provided educators with access to assessment data in 2011-12. This difference is not statistically significant.
Notes: The percentages in the figure are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator for the high poverty percentages is the estimated number of high-poverty districts (had a child poverty rate above 21.66 percent) that have sufficient data (i.e., answered enough questions to calculate the indicator). The denominator for the other percentages is the estimated number of districts with sufficient data that had a child poverty rate at or below 21.66 percent. Detailed tables in appendix D provide confidence intervals for each percentage.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) program, District Data for 2008 (USSD08.xls) for poverty data. Retrieved November 11, 2010, from http://www.census.gov/did/www/saipe/data/schools/index.html.

District Size

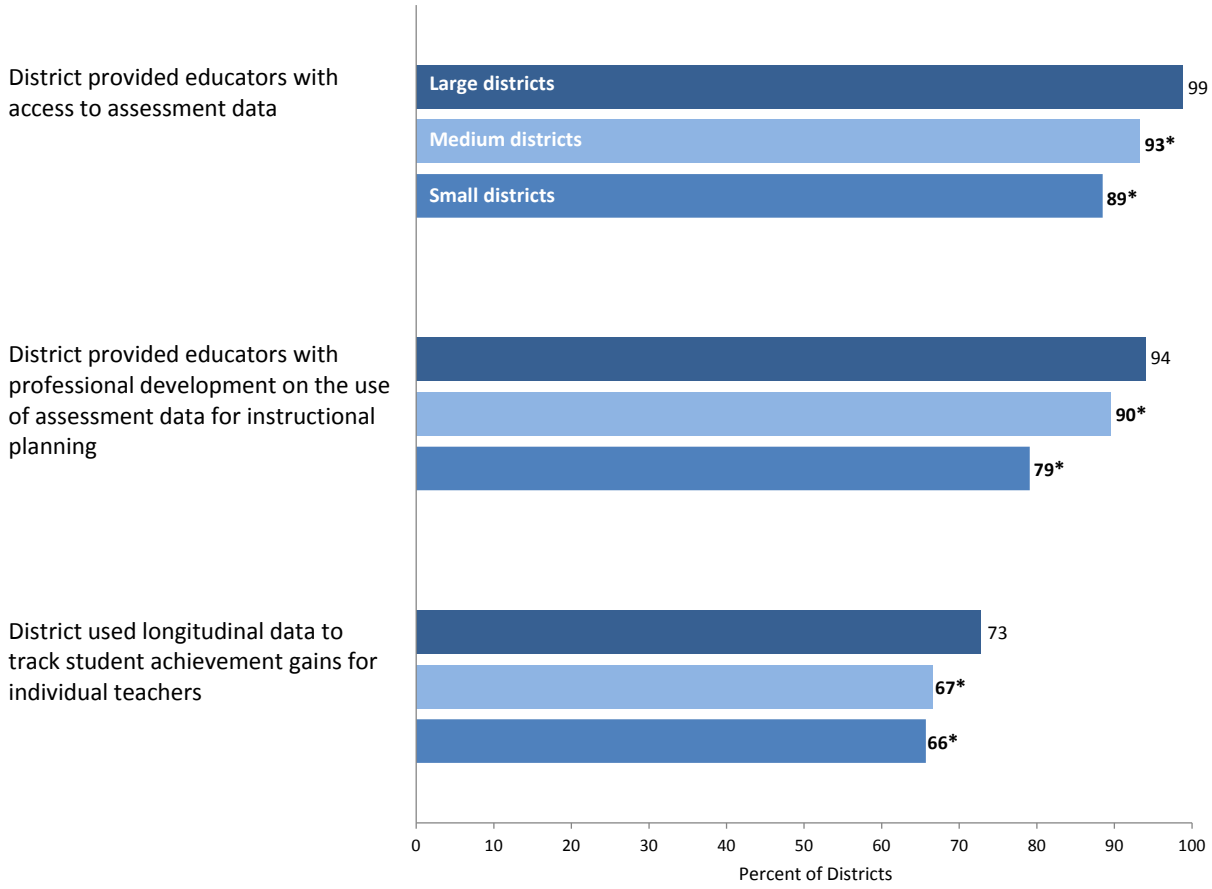
- **In 2011-12, large districts were significantly more likely than either medium-sized or small districts to support reforms related to educators' use of data (figure 3-5).**

    - While nearly 90 percent of districts overall reported providing educators with access to assessment data, large districts were significantly more likely than other districts to report doing so. Ninety-nine percent of large districts (those with at least 50,000 students) reported that they provided educators with access to assessment data compared with 93 percent of medium districts (15,000 to 49,999 students) and 89 percent of small districts (fewer than 15,000 students).

    - Ninety-four percent of large districts reported that they provided educators with professional development on the use of assessment data for instructional planning compared with 90 percent of medium districts and 79 percent of small districts.

    - Seventy-three percent of large districts reported that they used longitudinal data to track student achievement gains for individual teachers compared with 67 percent of medium districts and 66 percent of small districts.

Figure 3-5. Comparison of the support for reforms related to educators' use of student data in large districts and in districts of other sizes: 2011-12



*Percentage is significantly different from percentage for large districts ($p < .05$).

Figure Reads: Ninety-nine percent of large districts reported that they provided educators with access to assessment data in 2011-12. In contrast, 93 percent of medium-sized districts and 89 percent of small districts reported that they provided educators with access to assessment data that year. The differences between large districts and small and medium districts are statistically significant.

Notes: The percentages in the figure are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator for a size group is the estimated number of districts of a given size with sufficient data (i.e., answered enough questions to calculate the indicator). District size is based on the student enrollment in schools in the district. Large districts have at least 50,000 students. Medium districts have less than 50,000 but at least 15,000 students. Small districts have fewer than 15,000 students. Detailed tables in appendix D provide confidence intervals for each percentage.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. National Center for Education Statistics, Common Core of Data. Local Education Agency Universe Survey: School Year 2008–09 (ag081a.sas7bdat) for Enrollment Size. Retrieved August 24, 2010, from http://nces.ed.gov/ccd/pubagency.asp.

District Challenges Associated With Implementing Data Systems Reforms: 2011-12

Districts were also asked about a variety of potential challenges they were likely to encounter at the local level in supporting access to assessment data and data use. As with SEAs, a district did not report on challenges related to a particular reform strategy if it was not implementing that strategy.

- **Delays in transmission of assessment results to schools or teachers and insufficient funding to support data systems that store and provide access to assessment information were the challenges perceived as major by the largest percentage of districts in 2011-12 (table 3-2) rating these challenges.**

    - Thirty-five percent of the districts perceived delays in transmission of assessment results to schools or teachers as a major challenge.

    - Thirty-three percent of districts perceived insufficient funding to support data systems that store and provide access to assessment information as a major challenge.

- **The challenges least likely to be perceived as major by the districts that rated them were lack of clear SEA guidance or support on using state assessment data systems and restrictions in rules and regulations relating to what can be included in state or district data systems and how to access them (table 3-2).**

    - Both of these challenges were rated as major by 14 percent of the districts.

Table 3-2. Percentage of districts that reported major challenges using student assessment data: 2011-12

District challenge	Percent of districts	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Delays in transmission of assessment results to schools or teachers	35	94
Insufficient funding to:		
Support data systems that store and provide access to assessment information	33	97
Train educators in how to administer and use assessments	26	96
Lack of district staff capacity or expertise to:		
Provide guidance about or train educators on how to use assessments to improve instruction	19	97
Maintain and facilitate educators' access to assessment data systems	18	97
Lack of clear SEA guidance or support on using state assessment data systems	14	87
Restrictions in rules and regulations relating to what can be included in state or district data systems and how to access them	14	85

Table Reads: In 2011-12, 35 percent of the districts rating this challenge perceived delays in transmission of assessment results to schools or teachers as a major challenge to using assessment data. Ninety-four percent of districts rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Districts rating the challenge excludes districts that identified the challenge as not applicable and districts that did not respond to the question.

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix D provide confidence intervals for each percentage and the results of significance tests for comparisons of the percentages across challenges.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

School-Level Findings

This section first describes the study's school-level indicators of reform related to data use. We then use the indicators to describe schools' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Next, we compare the percentage of low-performing schools in which these reforms were implemented to the corresponding percentages among other schools. Last, we conclude this section with a report of major challenges related to access and use of assessment data, as reported in 2011-12 by schools. (See appendix D for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

School-Level Reform Indicators

It is at the school level that teachers use assessment data to plan instruction for individual students, and principals use data to monitor and facilitate the instruction provided by individual teachers. The four data use indicators we examined at the school level were:

- Whether teachers in the school had online access to student assessment results;
- Whether the school used student assessment data to identify students for additional support;
- Whether the school used assessment data to tailor instruction; and
- Whether the school used longitudinal student assessment data to track student achievement gains for individual teachers.

Online access to student assessment results is an important indicator because having such immediate access is likely to facilitate teachers' use of the information. We included whether the school used student assessment data to identify students for additional support and whether the school used assessment data to tailor instruction because these are concrete examples of ways educators can use the data made available by state and district data systems.

Whether the school used longitudinal student assessment data to track student achievement gains for individual teachers is important to examine because in many schools, this is a potential input into decisions on teacher professional development, evaluation, and assignment that affect the equitable distribution of effective teachers. School leaders can also use these data to track the effects of professional development and similar initiatives to improve teaching practice and share it with teachers so that they can monitor the effectiveness of their instruction. Both the RTT and SIG programs encourage use of data by teachers and principals to improve school performance.

Implementation of Data Systems Reforms: 2011-12

- **In 2011-12, most schools (95 percent or greater) used student assessment data to improve instruction (figure 3-6).**

    - Ninety-eight percent of schools reported that in 2011-12, they used student assessment data to identify students for additional support.

    - Ninety-five percent of schools reported that in 2011-12, they used student assessment data to tailor instruction.

- **Ninety-two percent of schools reported that teachers had online access to student assessment results in 2011-12.**

- **Seventy-one percent of schools reported that in 2011-12, they used longitudinal data to track student achievement gains for individual teachers.**

Progress of Data Systems Reforms: 2009-10 to 2011-12

- **From 2009-10 to 2011-12, there was a statistically significant increase in the percentage of schools using student data to support instruction (figure 3-6).**

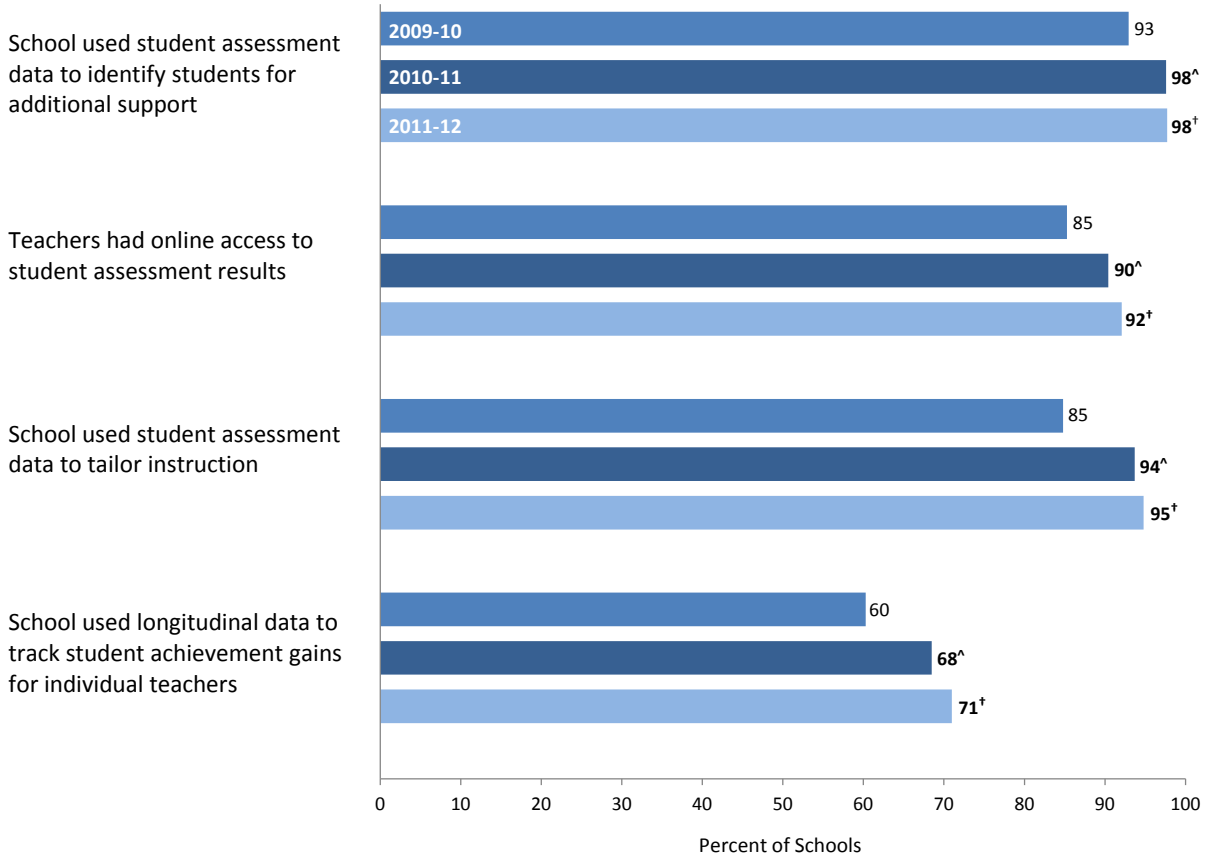
    - A higher percentage of schools reported that they used student assessment data to identify students for additional support in 2011-12 than in 2009-10 (98 percent compared with 93 percent).

    - A higher percentage of schools reported that they used student assessment data to tailor instruction in 2011-12 than in 2009-10 (95 percent compared with 85 percent)

    - A higher percentage of schools reported that teachers had online access to student assessment results (92 percent compared with 85 percent).

    - A higher percentage of schools reported that they used longitudinal data to track student achievement gains for individual teachers (71 percent compared with 60 percent).

Figure 3-6. Percentage of schools that used student data to support instruction: 2009-10, 2010-11, and 2011-12



^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).
† Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).
Figure Reads: Ninety-three percent of schools reported that they used student assessment data in 2009-10 to identify students for additional support. In 2010-11, 98 percent of schools reported using student assessment data for that purpose, and 98 percent did so in 2011-12. The difference between the percentages for 2010-11 and 2009-10 and the difference between the percentages for 2011-12 and 2009-10 are statistically significant.
Notes: The percentages in the figure are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. The denominator for these percentages is the estimated number of districts with sufficient data (i.e., answered enough questions to calculate the indicator). See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix D provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages across indicators.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Implementation of Data Systems Reforms by School Performance Status: 2011-12

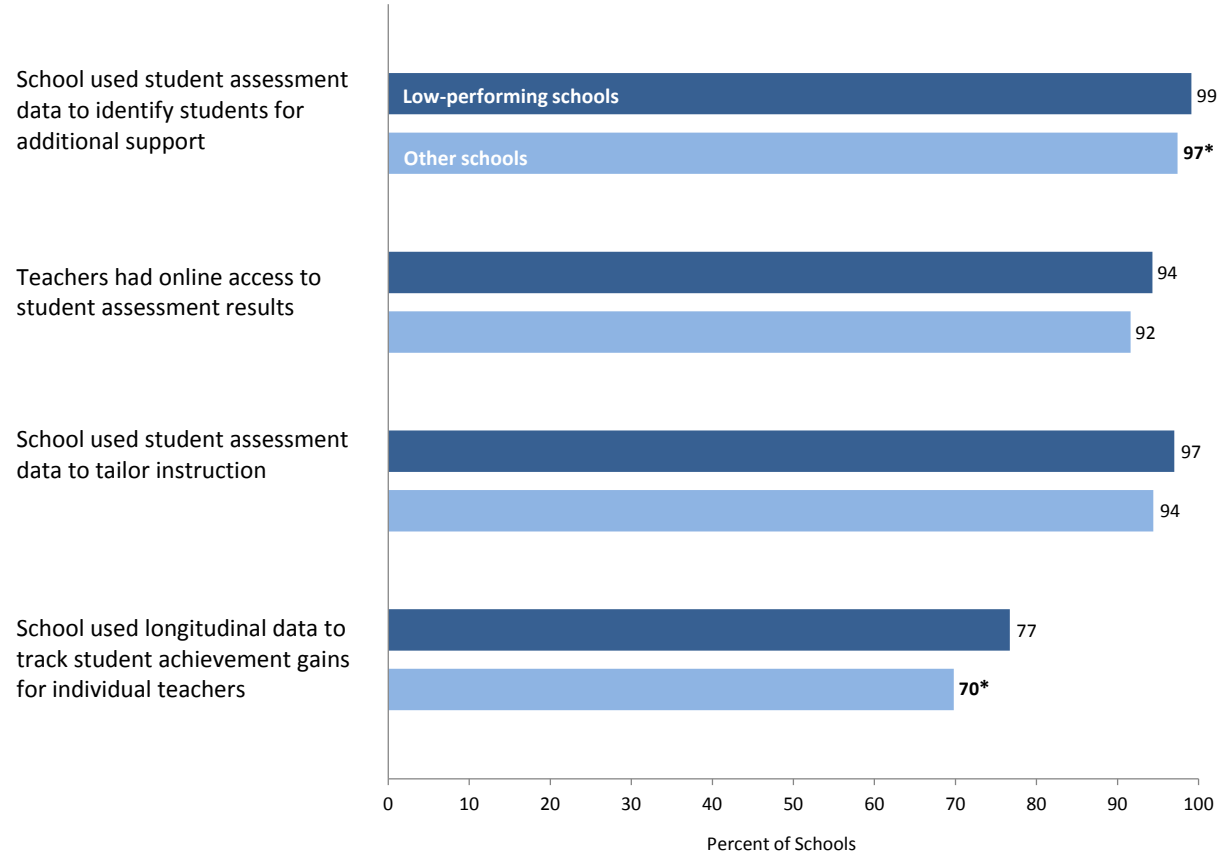
Improving the performance of students in low-performing schools is a major goal of the Recovery Act's education provisions, and data use by low-performing schools to guide instruction and improvement planning is likely to be an important school improvement strategy. Use of data for improving instruction in low-performing schools was explicitly recognized by its inclusion in the SIG program's turnaround and transformation models. We therefore compared the percentage of low-performing schools meeting the reform indicators in 2011-12 to the percentage of other schools.

- **In 2011-12, while almost all schools reported using assessment data to identify students for additional support, low-performing schools were even more likely to do so than other schools (figure 3-7).**

    - Ninety-nine percent of low-performing schools used student assessment data to identify students for additional support compared with 97 percent of other schools, which is a statistically significant difference.

- **Seventy-seven percent of low-performing schools used longitudinal data to track student achievement gains for individual teachers compared with 70 percent of other schools.**

Figure 3-7. Comparison of the use of student data to support instruction in low-performing schools and in other schools: 2011-12



* Percentage is significantly different from percentage for low-performing schools ($p < .05$).
Figure Reads: Ninety-nine percent of low-performing schools reported that they used student assessment data in 2011-12 to identify students for additional support. In contrast, 97 percent of all other schools did so. This difference is statistically significant.
Notes: The percentages in the figure are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator is the estimated number of schools in the performance status category (low performing, other) with sufficient data (i.e., answered enough questions to calculate the indicator). Low-performing schools include schools that were in improvement, corrective action, or restructuring; were identified as among the lowest-achieving schools; or that have had a graduation rate below 60 percent over a number of years. Detailed tables in appendix D provide confidence intervals for each percentage.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Challenges Associated With Implementing Data Systems Reforms: 2011-12

Schools were asked about five of the same potential challenges in accessing and using assessment data as districts were asked to rate. As with SEAs and districts, a school did not report on a challenge if it was not using the relevant reform strategy.

- **Delays in transmission of assessment results to schools or teachers was the major challenge identified by the largest percentage of schools rating this challenge in 2011-12 (table 3-3).**
    - Twenty-one percent of the schools rated delays in transmission of assessment results as a major challenge.
- **Lack of clear district guidance or support on using state and district assessment data systems was the challenge least likely to be perceived as major by the schools that rated this challenge (table 3-3).**
    - Eight percent of the schools rated it as a major challenge.

Table 3-3. Percentage of schools that reported major challenges using data systems for storing, reporting, and using assessment results: 2011-12

School challenge	Percent of schools	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Delays in transmission of assessment results to school or teachers	21	93
Insufficient funding to purchase or sustain data systems that store and provide access to assessment information	18	90
Lack of school staff or expertise to:		
Train educators on how to use assessments to improve instruction	11	94
Maintain and facilitate educators' access to assessment data systems	10	94
Lack of clear district guidance or support on using state and district assessment data systems	8	90

Table Reads: In 2011-12, 21 percent of schools rating this challenge perceived delays in transmission of assessment results to school or teachers as a major challenge to using data systems for storing, reporting, and using assessment results. Ninety-three percent of schools rated this challenge.

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge.

[2] Schools rating the challenge excludes schools that identified the challenge as not applicable and schools that did not respond to the question.

Notes: The percentages in the table are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix D provide confidence intervals for each percentage and the results of significance tests for comparisons of the percentages across challenges.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Comparisons Across Levels

In this section, we point out similarities and differences across the three levels in the implementation of data systems reforms and major challenges experienced by districts and schools.

Progress of Data Systems Reforms: 2009-10 to 2011-12

- **While more SEAs facilitated access to assessment data and provided professional development or technical assistance on their use in 2011-12 than 2009-10, there was no corresponding district trend. However, a significantly larger percentage of schools reported in 2011-12 than in 2009-10 that teachers had online access to student assessment results and used student assessment data to identify students for additional support or to tailor instruction (figures 3-1, 3-3, 3-6).**

    - The number of SEAs reporting that they facilitated access to assessment data and provided professional development or technical assistance to support educators' use of assessment data increased from 35 to 45 and 32 to 47, respectively, from 2009-10 to 2011-12. However, there was no statistically significant increase in the percentage of districts reporting that they provided educators with access to assessment data and professional development on the use of assessment data for instructional planning.

    - The percentage of schools reporting that teachers had online access to student assessment results increased from 85 percent in 2009-10 to 92 percent in 2011-12, the percentage of schools reporting that they used student assessment data to tailor instruction increased from 85 to 95 percent, and the percentage reporting that they used assessment data to identify students for additional support increased from 93 to 98 percent.

Challenges Associated With Implementing Data Systems Reforms: 2011-12

SEAs have a different role in implementing data systems reforms compared with districts and schools. As a result, the study presented a different list of potential challenges to SEAs than districts and schools. In this section, we present the challenges most often rated as major challenges for districts and schools.

- **At both the district and school levels, the two challenges most frequently rated as major were delays in transmission of assessment results to schools or teachers (rated as a major challenge by 35 percent of districts and 21 percent of schools) and insufficient funding to support data systems that store and provide access to assessment information (rated as a major challenge by 33 percent of districts and 18 percent of schools) (tables 3-2 and 3-3).**

Chapter 4: Educator Workforce Development

The Recovery Act provided substantial incentives for states and districts to work to increase teacher effectiveness and the equitable distribution of effective teachers. The act's component programs emphasized efforts to develop a more effective educator workforce through the preparation of new educators and the adoption of educator evaluation and compensation policies to promote the recruitment, retention, and equitable distribution of those educators who were determined to be effective. As part of these reforms, the Recovery Act promoted, and under some grant programs required, that the effectiveness of teachers and principals be, at least partially, demonstrated through growth in their students' achievement.

The reform priorities of the Recovery Act built on earlier federal educator workforce policies and initiatives. NCLB singled out the importance of assigning "highly qualified" teachers to serve in Title I schools. Title II, Part A of ESEA also supported efforts to improve teacher quality by both states and districts. Beginning in 2006, ED's TIF program provided grants to selected SEAs and LEAs to support performance-based teacher and principal compensation systems. Earlier grants to states for developing longitudinal data systems sought to provide the infrastructure for tracking individual students' achievement across years, a prerequisite for assessing teachers' and principals' contribution to student growth. In addition, even before 2009, some states and districts were experimenting with or fully implementing alternative teacher preparation programs, evaluation systems, and pay structures (U.S. Department of Education, 2010b). For example, Florida, Kentucky, North Carolina, and Texas were early implementers of performance-based pay, along with districts such as Charlotte-Mecklenburg, North Carolina, and Denver, Colorado (Gonering, Teske, and Jupp, 2007; Heneman, Milanowski, and Kimball, 2007; Kelley, Heneman, and Milanowski, 2002; Springer et al., 2010).

While the reforms promoted by the Recovery Act overlapped with earlier policy and implementation efforts, the act provided incentives for broader implementation of these strategies across the country and at the state, district, and school levels. The priorities, reporting requirements, and incentives contained in the act's various grant programs encouraged state leadership on educator workforce efforts, both in areas where SEAs historically had played a strong role (e.g., teacher licensure and certification) and in areas where SEAs had been less involved (e.g., teacher evaluation and pay). In particular, the selection priorities of the RTT competitions and the SFSF requirements to report on the use of student growth as an evaluation criterion and on the distribution of educator performance ratings within districts encouraged states to pay more attention to rigorous educator evaluation. The TIF and SIG components of the act also extended incentives for evaluation and compensation reform directly to districts and schools and independent of states. TIF required both compensation differentiation based on student achievement gains and evaluation that was based substantially on such gains. SIG identified compensation differentiation based on student growth as a permissible strategy and required evaluation that included consideration of growth as part of the transformation model.

Fully realizing the act's reform vision requires actions at the state, district, and school levels of the system. Each level has a somewhat different role, and the act's components varied in their emphasis on state, district, or school actions. To provide a picture of the prevalence and progress of the reforms promoted by the act, we identified and examined indicators of reform at all three levels.

Using these indicators, this chapter describes the prevalence and progress of state, district, and school implementation or support for implementation of Recovery Act reforms aimed at improving the

quality of the educator workforce. We also report on the major challenges to implementing these reforms perceived by survey respondents at each level. In this chapter we also examine whether prevalence of reform during the final year of the study varied by key state, district, and school characteristics. For states, we compare implementation by those states awarded RTT grants and all other states. For districts, we compare reform implementation by district poverty status and district enrollment size. For schools, we compare those that are low performing with all other schools. The chapter ends with a comparison of the progress and challenges across levels.

Key Findings Across Levels

- **While the number of SEAs that supported the educator workforce reforms related to principal evaluation, teacher evaluation, and teacher compensation increased between 2009-10 and 2011-12, the percentages of districts and schools implementing these reforms did not increase or decreased during this time (figures 4.1, 4.3, and 4.6).**

- **Difficulty measuring student growth for teachers of subjects with no standardized tests was rated as a major challenge at all three levels in 2011-12. This was the challenge most frequently rated as major by SEAs and was the fourth most frequently rated major challenge by districts and schools (tables 4.1, 4.2, and 4.3).**

- **At all three levels, concerns or opposition from educators about performance-based compensation were more likely to be rated as a major challenge than concerns or opposition about evaluation based on student achievement in 2011-12 (tables 4.1, 4.2, and 4.3).**

- **Although not asked at the SEA level, large percentages of both districts and schools rated insufficient funding to provide performance-based compensation or differential compensation as major challenges. (tables 4.2 and 4.3).**

State-Level Findings

In this section, we first describe the study's state-level indicators of reform related to the act's priorities for educator workforce improvement. We then use the indicators to describe SEAs' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Next, we report on whether a greater percentage of RTT states implemented these reforms in 2011-12 compared with states that did not receive RTT grants. Last, this section reports on the major challenges related to carrying out some of the most important reforms envisioned by the act, as reported in 2011-12 by SEAs.

State-Level Reform Indicators

Major components of the act such as SFSF and RTT provided incentives for states to change policies with respect to educator preparation, evaluation, and compensation. At the state level, we examined five indicators that reflect the act's priorities for educator workforce improvement. These are whether the SEA:

- Simplified or shortened the educator licensure process or authorized non-university preparation programs;
- Issued standards or guidelines for teacher and principal preparation programs;
- Supported the use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation;
- Supported use of student achievement gains for principal evaluation; and
- Supported differentiating teacher compensation based on student achievement gains.

The first indicator is included because during the last 20 years, there has been a fear of teacher shortages, concerns that traditional university-based programs restrict the number of teachers entering the market and require unnecessary coursework, and a desire to accommodate career changers who already have a bachelors' degree. These issues led to an interest in streamlining preparation programs and allowing organizations other than universities to prepare teachers (National Commission on Teaching and America's Future, 1996). We also included this indicator because the RTT competition included as a selection criterion whether states allowed alternative routes to certification for teachers and principals, particularly routes that allow for providers in addition to institutions of higher education, and whether such routes were in use.

We also included an indicator of whether states issued standards or guidelines for teacher and principal preparation programs that promote alignment of teacher preparation programs to new or revised state content standards or state teacher performance standards, training students on practices to improve low-performing schools, and tracking the effectiveness of graduates. These are potential actions SEAs could take to improve the quality of newly prepared teachers. In addition, the RTT selection requirements encouraged states to link information on student growth of educators' students to the programs where the educators were prepared and report this information publically for each program approved by the state.

Research has shown that the teacher characteristics underlying NCLB's definition of a highly qualified teacher are not related to teacher effectiveness (e.g., Palardy and Rumberger, 2008; Phillips, 2010; Smith, Desimone, and Ueno, 2005), and in its proposals for ESEA reauthorization, ED proposed replacing teacher credentials with the results from teacher evaluations for assessing the degree to which effective teachers are distributed equitably (U.S. Department of Education, 2010b). We included an indicator of SEA support for multi-level ratings, multiple observations, and student achievement gains for teacher evaluation because these reflect important requirements in Recovery Act programs. Multiple rating levels, multiple observations, and taking student achievement gains or growth into account are core requirements for evaluation systems for TIF program grantees. The use of multiple levels and

student gains was an RTT selection criterion, and evaluation using multiple observations and student achievement gains was a required strategy in the SIG school transformation model. The SFSF requires states to report on whether teacher evaluation systems used in the state include student achievement outcomes or student growth data as an evaluation criterion. Teacher evaluation systems including measurements of student achievement growth are also argued to better distinguish between effective and ineffective teachers (e.g., Glazerman et al., 2010) and, if so, would provide better information to target efforts to improve teacher quality and its equitable distribution. States and districts can use this information to target professional development to less effective teachers as well as identify the most effective teachers from whom to learn (Garet et al., 2010; Goe, Biggers, and Croft, 2012).

As with teachers, assessment of principal performance based on student achievement gains or growth has the potential for increasing the rigor of principal evaluation and providing a better measure of effectiveness for decisions about professional development and assignment and for assessing the equitable distribution of effective school leaders. We included an indicator of whether states supported use of student achievement gains for principal evaluation because such use was a core requirement of the TIF grant program, an RTT eligibility requirement and selection criterion, and because states were required to report whether their systems to evaluate the performance of principals include student achievement outcomes or student growth data as an evaluation criterion.

We included an indicator on whether the state supported differentiating teacher compensation based on student achievement gains because this type of performance-based compensation was a core requirement of the TIF, as well as being implied by the RTT selection criterion that evaluation systems based on student growth would be used to inform teacher compensation decisions and that highly effective teachers would be provided with opportunities for additional compensation. See appendix B for the components, decision rules, and specific Recovery Act requirements embodied in each indicator.

Implementation of Educator Workforce Development Reforms: 2011-12

- **Reforms related to educator preparation were the most common type of workforce reform implemented by 2011-12 (by 35 to 39 SEAs, figure 4-1).**
    - Thirty-nine SEAs reported that they had simplified or shortened educator licensure processes or authorized non-university preparation programs.[51]
    - Thirty-eight SEAs reported having issued standards or guidelines for teacher preparation programs.
    - Thirty-five SEAs reported having issued standards or guidelines for principal preparation programs.
- **In 2011-12, between 14 and 22 states supported reforms related to teacher and principal evaluation and teacher compensation. Use of achievement data for principal evaluation was most common among these reforms.**
    - Fifteen SEAs reported that they supported differentiating teacher compensation based on student achievement gains.

[51] See Appendix table E.1 for the number of SEAs that implemented each of these reforms.

- Twenty-two SEAs reported that they supported use of student achievement gains for principal evaluation.

- Fourteen SEAs reported that they supported use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation. When we examined the individual evaluation components of this indicator, we observed that an additional six SEAs reported supporting use of student achievement gains, but did not also support the other two features of teacher evaluation (see appendix table E.2).

Progress of Educator Workforce Development Reforms: 2009-10 to 2011-12

- **The number of states supporting reforms in educator preparation increased from 2009-10 to 2011-12[52] (figure 4-1).**

  - Six more SEAs reported that they simplified or shortened educator licensure processes or authorized non-university preparation programs (increased from 33 to 39 SEAs).

  - Ten more SEAs reported that they issued standards or guidelines for teacher preparation programs (increased from 28 to 38 SEAs).

  - Fifteen more SEAs reported that they issued standards or guidelines for principal preparation programs (increased from 20 to 35 SEAs).

- **The number of states supporting reforms in evaluation and teacher compensation increased from 2009-10 to 2011-12.**

  - Eight more SEAs reported that they supported differentiating teacher compensation based on student achievement gains (increased from 7 to 15 SEAs).

  - Sixteen more SEAs reported that they supported the use of student achievement gains for principal evaluation (increased from 6 to 22 SEAs).

  - Thirteen more SEAs reported that they supported use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation (increased from 1 to 14 SEAs).

[52] Because these indicators measure state activities that require a one-time action and may remain in effect across years, SEAs that reported reforms in either of the previous years were considered as continuing the activity in 2011-12.

Figure 4-1. Number of state education agencies (SEAs) that implemented educator workforce development reforms: 2009-10, 2010-11, and 2011-12

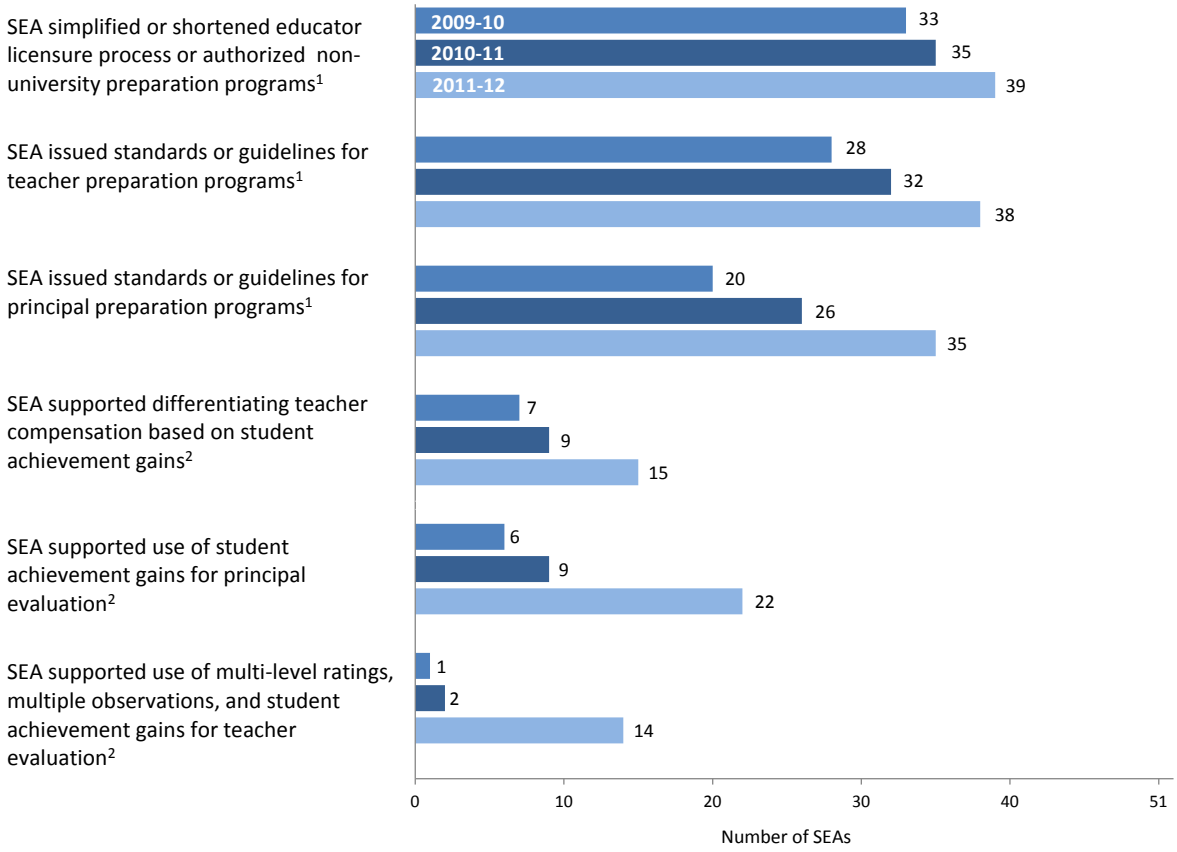


Figure Reads: Thirty-three SEAs reported that in 2009-10, they simplified or shortened the educator licensure process or authorized non-university educator preparation programs. Thirty-five SEAs did so by 2010-11 and 39 in 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years. See appendix A for more information about how data for previous years were used in these indicators.

[2] To meet these indicators, SEAs not only had to play a role in supporting implementation, but also had to be supporting the specific types of systems that the Recovery Act explicitly identified. For the differentiated teacher compensation indicator, two states that met the indicator in 2010-11 are counted as meeting the indicator in 2011-12 given that their role in supporting implementation was a potentially ongoing or continued activity. In addition, for the principal evaluation indicator, one state that met the indicator in 2010-11 is counted as meeting the indicator in 2011-12 for the same reason. See appendix A for more information about how data for previous years were used in these indicators.

Notes: Respondents include 50 states and DC.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys.

Implementation of Educator Workforce Development Reforms by State RTT Status: 2011-12

Because of the strong emphasis of the RTT program on state-level action to improve the preparation and evaluation of educators, and the additional resources provided by the grants, we expected that by 2011-12, a higher percentage of states that had won RTT grants would have implemented the reforms we examined compared with other states.

- **States that were awarded RTT grants were more likely than other states to have implemented educator preparation reforms in 2011-12 (figure 4-2).**

    - All 12 of the SEAs in RTT-wining states reported that they simplified or shortened the educator licensure process or authorized non-university preparation programs, compared with 27 of 39 SEAs in other states. Ten of the 12 SEAs in RTT-winning states issued standards or guidelines for principal preparation programs, compared with 25 of 39 SEAs in other states.

    - Nine of the 12 SEAs in RTT-winning states reported that they issued standards or guidelines for teacher preparation programs, compared with 29 of 39 in other states.

- **States that were awarded RTT grants were more likely than other states to have supported educator evaluation and compensation reforms in 2011-12.**

    - The largest differences between RTT states and other states were in the area of educator evaluation, with RTT states being more likely to support the use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation (9 of 12 RTT states compared with 5 of the 39 other states); the use of student achievement gains for principal evaluation (10 of 12 compared with 12 of 39); and differentiating teacher compensation based on student achievement gains (6 of 12 compared with 9 of 39).

Figure 4-2. Comparison of the implementation of educator workforce development reforms in Race to the Top (RTT) states and in other states: 2011-12

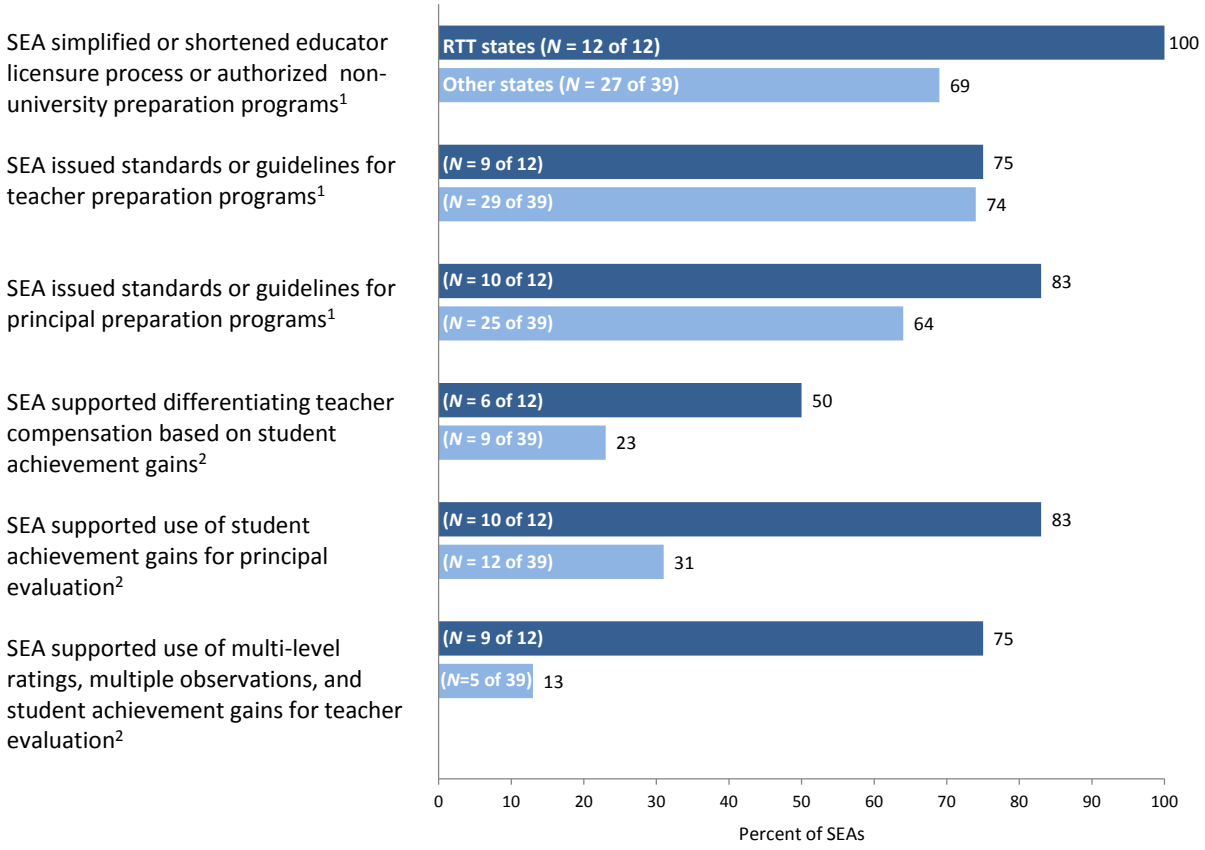


Figure Reads: All 12 state education agencies (SEAs) in RTT states reported that in 2011-12 they had simplified or shortened the educator licensure process or authorized non-university educator preparation programs (100 percent). In contrast, 27 of 39 SEAs in all other states had done so (69 percent).

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years. See appendix A for more information about how data for previous years were used in these indicators.

[2] To meet this indicator, SEAs not only had to play a role in supporting implementation, but also had to be supporting the specific types of systems that the Recovery Act explicitly identified. Two states that met the indicator in 2010-11 are counted as meeting the indicator in 2011-12 given that their role in supporting implementation was a potentially ongoing or continued activity. See appendix A for more information about how data for previous years were used in these indicators.

Note: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN).

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

Challenges Associated With Implementing Educator Workforce Development Reforms: 2011-12

SEAs working to implement specific educator workforce reform strategies were asked to report on associated challenges. Given the Recovery Act's focus on including growth in student achievement in educator compensation and evaluation systems and the focus on defining "effectiveness" at least partially in terms of demonstrated growth in student achievement, we were especially interested in challenges they encountered when implementing these reforms. SEAs were also asked about challenges in implementing educator recruitment, hiring, and induction and in influencing educator preparation programs. An SEA did not report on challenges related to a particular reform strategy if it was not implementing a that strategy.

- **Difficulty in measuring student growth for teachers of subjects that had no standardized tests was the most frequent major challenge reported by SEAs in 2011-12 (table 4-1).**

    - Thirty-five of the 46 SEAs rating this challenge perceived difficulty in measuring student growth for teachers of non-tested subjects as a major challenge.

- **Challenges related to educator compensation were more likely to be rated as major than similar challenges related to educator evaluation in 2011-12.**

    - Twenty-four of the 34 SEAs rating this challenge rated concerns or opposition from educators about performance-based compensation as a major challenge.

    - Twenty-four of the 47 SEAs rating this challenge rated concerns or opposition from educators about evaluating educators based, at least in part, on student achievement as a major challenge.

    - Twelve of the 32 SEAs rating this challenge perceived restrictions in rules and regulations on how educators can be compensated as a major challenge.

    - Six of the 43 SEAs rating this challenge reported that restrictions in rules and regulations on how educators can be evaluated as a major challenge.

Table 4-1. Number of state education agencies (SEAs) that reported major challenges when working with districts and others to develop and manage a skilled educator workforce: 2011-12

SEA challenge	Number of SEAs that reported challenge as a major challenge[1]	Total number of applicable SEAs[2]
Difficulty in measuring student growth for teachers of non-tested subjects	*35*	46
Concerns or opposition from educators about performance-based compensation	*24*	34
Concerns or opposition from educators about evaluating educators based, at least in part, on student achievement	*24*	47
Lack of SEA staff or expertise to provide LEAs with professional development or technical assistance on differentiated teacher compensation systems	*14*	30
Lack of SEA staff or expertise to develop reliable and fair methods for a statewide system of educator performance evaluation based partly on student achievement	*19*	46
Restrictions in rules and regulations on how educators can be compensated	*12*	32
Lack of SEA staff or expertise to provide LEAs with professional development or technical assistance on educator recruitment, hiring, and induction	*14*	41
Resistance from colleges and universities to modifying educator preparation programs to changing state reform priorities	*12*	47
Lack of clear federal guidance or support on educator compensation or evaluation systems	*8*	42
Restrictions in rules and regulations on how educators can be evaluated	*6*	43

Table Reads: In 2011-12, 35 of the 46 SEAs rating this challenge perceived difficulty in measuring student growth for teachers of nontested subjects as a major challenge when working with districts and others to develop and manage a skilled educator workforce.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable and SEAs that did not respond to the question.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

District-Level Findings

This section begins by describing the study's district-level indicators of workforce development reform. We then use the indicators to describe districts' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Next, we compare the percentage of districts implementing these reforms in 2011-12, with districts categorized first by poverty level and then by enrollment size. We conclude this section with a report of the major challenges experienced by districts carrying out the workforce development reforms envisioned by the act, as reported in 2011-12 by districts. (See appendix E for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

District-Level Reform Indicators

While the Recovery Act promoted a stronger state role in improving the quality of the educator workforce, districts, as the employers of educators, continued to have an important influence on the workforce and the equitable distribution of educators. Realizing the Recovery Act's vision for improving the educator workforce requires that districts implement hiring, evaluation, compensation, and retention policies that promote educator effectiveness and the equitable distribution of teachers. In addition, the TIF and i3 components of the Recovery Act bypassed states by providing funding directly to districts willing to undertake evaluation and compensation reforms.

At the district level, we examined three indicators of reform that parallel the state-level indicators and are directly related to requirements for educator evaluation or compensation in one or more of the act's components.[53] These are whether the district:

- Operated a teacher evaluation system that included multi-level rubrics, multiple observations, and student achievement gains;
- Operated a principal evaluation system that included student achievement gains; and
- Differentiated teacher compensation based on student achievement gains.

We also tracked two indicators that are specific to districts. These district-specific indicators are whether the district:

- Provided school leaders with professional development or flexibility to hire effective teachers; and
- Used student achievement gains for teacher tenure, dismissal, or assignment decisions.

These two district-specific indicators were included because districts are typically responsible for hiring, assigning, and retaining teachers. The first of these two indicators includes two components: (a) providing school leaders with authority to hire more qualified transfer candidates without regard to

[53] The rationale for these parallel indicators is provided above in the section describing the state-level reform indicators.

district seniority rules and (b) providing professional development to principals on recruiting and hiring effective teachers. The first component was included because it is often argued that seniority hiring provisions inhibit schools from hiring the teachers that best fit their needs (e.g., Levin, Mulhern, Schunck, and New Teacher Project, 2005). Providing principals with the flexibility to hire teachers from within the district without regard to seniority may be one way to help ensure a better match between the school and the teacher and preventing high-need schools from having to accept transfers of less effective teachers laid off from or counseled out of other schools. The second component, providing principals with training in hiring, helps them make better use of this flexibility, as well as helping them select those job applicants more likely to be effective. More informed hiring of new and transfer teachers can help to ensure that teachers hired are effective and to promote equitable distribution of effective teachers (Behrstock, Clifford, and National Comprehensive Center for Teacher Quality, 2010).

The second district-specific indicator is based on districts' reports on whether they used student achievement gains for teacher tenure, dismissal, or assignment decisions. These decisions, which affect the equitable distribution of effective teachers and the overall quality of the teacher workforce, are primarily district responsibilities. Teacher effectiveness measures based on student achievement gains could be better indicators of teacher quality for use in making these decisions. RTT recognized this by requiring states to have a plan for participating LEAs to use evaluation results based on student achievement gains for tenure and dismissal. SFSF also required states to report on district evaluation systems used for these purposes.

Implementation of Educator Workforce Development Reforms: 2011-12

- **Sixty-three percent of districts reported that in 2011-12 they provided school leaders with professional development or flexibility to hire effective teachers (figure 4-3).**[54]

- **Reforms in teacher compensation, teacher and principal evaluation, and use of student achievement gains for personnel decisions were less commonly reported by districts in 2011-12 (8 to 30 percent) than was providing school leaders with professional development or flexibility to hire effective teachers (figure 4-3).**

    - Twenty-four percent of districts reported that they used student achievement gains for teacher tenure, dismissal, or assignment decisions.

    - Thirty percent of districts reported that they operated a principal evaluation system that included student achievement gains.

    - Seventeen percent of districts reported that they operated a teacher evaluation system that included multi-level rubrics, multiple observations, and student achievement gains. When looking at the individual evaluation components of this indicator, much higher percentages of districts used multiple observations (78 percent) or multi-level rubrics (69 percent) than used student achievement gains in NCLB grades/subjects in determining individual teacher performance ratings (20 percent). (See appendix table E.6)

[54] See Appendix table E.5 for the percentage of districts that implemented each of these reforms.

- Eight percent of districts reported that they differentiated teacher compensation based on student achievement gains.

Progress of Educator Workforce Development Reforms: 2009-10 to 2011-12

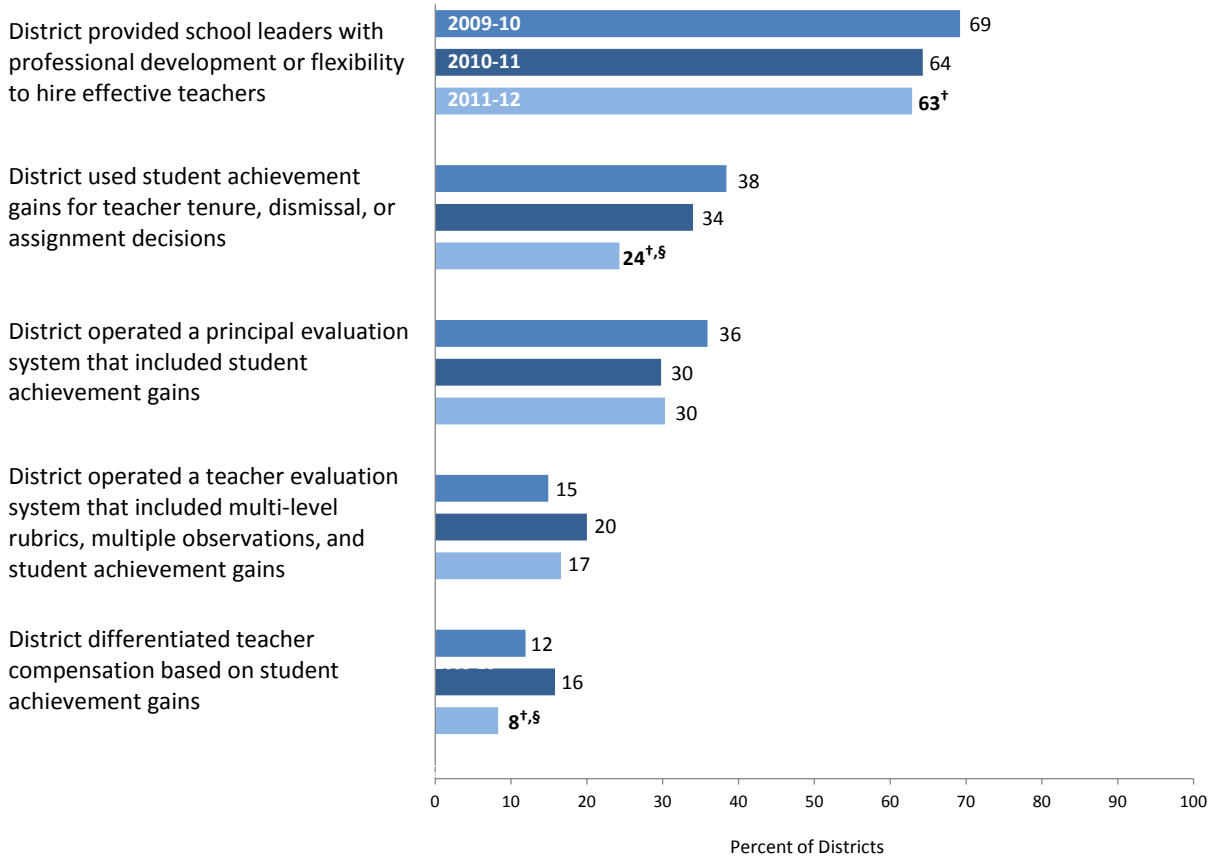
- **There were no statistically significant increases in the percentage of districts that used these educator workforce reforms in 2011-12 than did so in 2009-10 (figure 4-3), and the percentages decreased significantly for three of our five indicators.**

  - The percentage of districts that reported providing school leaders with professional development or flexibility to hire effective teachers decreased from 69 percent in 2009-10 to 63 percent in 2011-12.

  - The percentage of districts that reported using student achievement gains for teacher tenure, dismissal, or assignment decisions decreased from 38 percent to 24 percent.

  - The percentage of districts that reported differentiating teacher compensation based on student achievement gains decreased from 12 to 8 percent.

Figure 4-3. Percentage of districts that implemented reforms related to educator workforce development: 2009-10, 2010-11, and 2011-12



†Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).
§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).
Figure Reads: Sixty-nine percent of districts reported that in 2009-10 they provided school leaders with professional development or flexibility to hire effective teachers. In 2010-11, 64 percent of districts provided school leaders with professional development or flexibility to hire effective teachers, and 63 percent of districts did so in 2011-12. The difference between the percentage for 2011-12 and the percentage for 2009-10 is statistically significant.
Notes: The percentages in the figure are cross-sectional estimates for the population of districts operating in the 2010-11 school year. The denominator for these percentages is the estimated number of districts with sufficient data (i.e., answered enough questions to calculate the indicator). See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix E provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages across indicators.
For 2010-11 and 2011-12, districts were asked whether they used or included the strategy in all schools, some schools, or if they were not using the strategy; whether they were actively planning its use; or had no plans to use or include the strategy. Only districts that reported that they used or included the strategy in all or some schools were counted as meeting the indicator. For the 2009-10 school year, the response options included only Yes and No, and only those districts that responded Yes were counted as meeting the indicator.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Implementation of Educator Workforce Development Reforms by District Characteristics: 2011-12

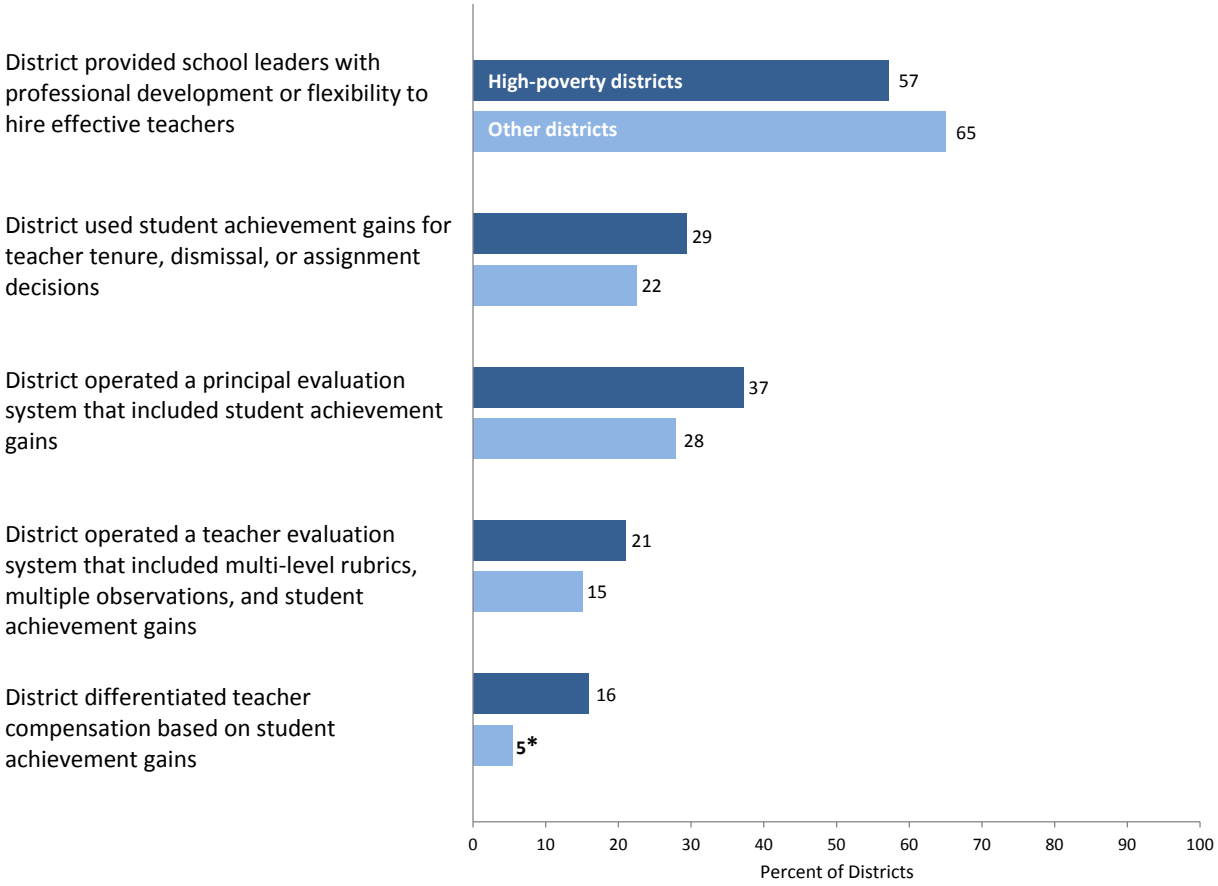
Because of the long-standing focus of federal education policy on reducing poverty-related inequities, we examined the differences in reform implementation in high-poverty districts compared with other districts. We expected that high-poverty districts might be more likely than other districts to have made progress in implementing Recovery Act reforms because of their receipt of funding under federal programs that link funding to the incidence of poverty. In addition, the TIF program also was restricted to schools in districts below a poverty threshold.

We also examined differences in implementation of reforms related to educator workforce among districts with varying enrollment sizes. Our hypothesis was that districts with relatively large enrollments would over time have developed greater administrative capacity to implement these reforms compared with districts with smaller enrollments. In particular, larger districts may have invested more resources in human resources management and systems needed to evaluate educators.

District Poverty Status

- **Contrary to expectations, in 2011-12, high-poverty districts were not more likely to implement workforce reforms, except for differentiating teacher compensation (figure 4-4).**
    - A higher percentage of high-poverty districts than other districts reported that they differentiated teacher compensation based on student achievement gains (16 percent compared with 5 percent).

Figure 4-4. Comparison of the implementation of reforms related to educator workforce development in high-poverty districts and in other districts: 2011-12



*Percentage is significantly different from percentage for high-poverty districts ($p < .05$).
Figure Reads: Fifty-seven percent of high-poverty districts and 65 percent of all other districts provided school leaders with professional development or flexibility to hire effective teachers in 2011-12 to improve the quality of teachers hired. This difference is not statistically significant.
Notes: The percentages in this figure are cross-sectional estimates for the population of districts operating in the 2010-11 school year. The denominator for the high-poverty percentages is the estimated number of high-poverty districts (had a child poverty rate above 21.66 percent) that have sufficient data (i.e., answered enough questions to calculate the indicator). The denominator for the other percentages is the estimated number of districts with sufficient data that had a child poverty rate at or below 21.66 percent. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix E provide confidence intervals for each percentage.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) Program, District Data for 2008 (USSD08.xls) for poverty data. Retrieved November 11, 2010, from http://www.census.gov/did/www/saipe/data/schools/index.html.

District Size

- **As expected, in 2011-12, large districts were significantly more likely than other districts to report that they implemented reforms related to educator workforce development (figure 4-5).**

    - Large districts (at least 50,000 students) were more likely than small districts (fewer than 15,000 students) to report that they provided school leaders with professional development or flexibility to hire effective teachers (74 percent compared with 63 percent). However, the difference between large and medium districts was not significant.

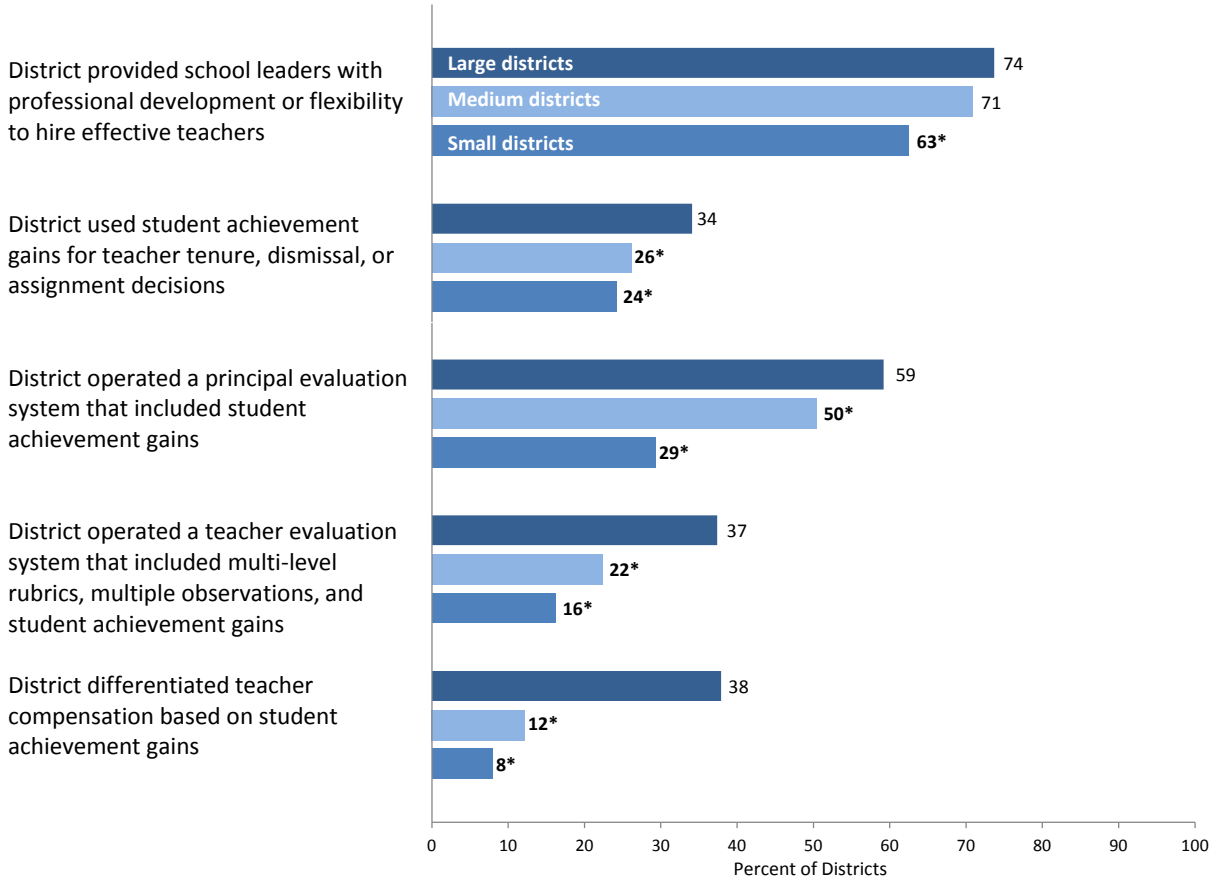
    - Thirty-four percent of large districts reported that they used student achievement gains for teacher tenure dismissal or assignment decisions compared with 26 percent of medium districts (15,000 to 49,999 students) and 24 percent of small districts.

    - Fifty-nine percent of large districts reported that they operated a principal evaluation system that included student achievement gains compared with 50 percent of medium districts and 29 percent of small districts.

    - Thirty-seven percent of large districts reported that they operated a teacher evaluation system that included multi-level rubrics, multiple observations, and student achievement gains compared with 22 percent of medium districts and 16 percent of small districts.

    - Thirty-eight percent of the large districts reported that they differentiated teacher compensation based on student achievement gains compared with 12 percent of the medium-sized and 8 percent of the small districts.

Figure 4-5. Comparison of the implementation of reforms related to educator workforce development in large districts and in districts of other sizes: 2011-12



*Percentage is significantly different from percentage for large districts ($p < .05$).
Figure Reads: Seventy-four percent of large districts provided school leaders with professional development or flexibility to hire effective teachers in 2011-12. In contrast, 71 percent of medium-sized districts and 63 percent of small districts did so. The difference between the percentages for large and small districts is statistically significant.
Notes: The percentages in this figure are cross-sectional estimates for the population of districts operating in the 2010-11 school year. The denominator for a size group is the estimated number of districts of a given size with sufficient data (i.e., answered enough questions to calculate the indicator). District size is based on the student enrollment in schools in the district. Large districts have at least 50,000 students. Medium districts have less than 50,000 but at least 15,000 students. Small districts have fewer than 15,000 students. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix E provide confidence intervals for each percentage.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. National Center for Education Statistics, Common Core of Data. Local Education Agency Universe Survey: School Year 2008–09 (ag081a.sas7bdat) for enrollment size. Retrieved August 24, 2010, from http://nces.ed.gov/ccd/pubagency.asp.

Challenges Associated With Implementing Educator Workforce Development Reforms: 2011-12

Like SEAs, districts were also asked about a variety of potential challenges in implementing the reforms promoted by the act. Some of the challenges were similar to those we asked of SEAs, while others were more specific to district roles in implementing educator workforce reforms. For example, districts were likely to be responsible for the costs of performance-based compensation. Grantees participating in the TIF program were expected to take on greater responsibility for costs associated with performance bonuses. As with SEAs, a district did not report on challenges related to a particular reform strategy if it was not implementing that strategy.

- **Insufficient funding for teacher compensation reform was the major challenge identified by the largest percentage of districts rating the challenges in 2011-12 (table 4-2).**
    - Eighty-four percent of districts perceived insufficient funding to provide differential compensation for teachers in high-need areas as a major challenge.
    - Eighty-three percent of districts perceived insufficient funding to provide performance-based compensation to all eligible teachers as a major challenge.
- **Fifty-nine percent of districts perceived difficulty in measuring student growth for teachers of nontested subjects as a major challenge in 2011-12.**
- **Challenges related to educator compensation were more likely to be rated as major than similar challenges related to educator evaluation in 2011-12**
    - Concern or opposition from educators related to performance-based compensation was rated as a major challenge for 59 percent of the districts, while 50 percent rated concerns or opposition about evaluating educators based on student achievement as a major challenge.
    - Fifty-six percent of districts rated restrictions in rules and regulations on how educators can be compensated as a major challenge, while only 36 percent rated restrictions in rules and regulations on how educators can be evaluated as a major challenge.

Table 4-2. Percentage of districts that reported major challenges when implementing educator evaluation and compensation systems: 2011-12

District challenge	Percent of districts	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Insufficient funding to provide differential compensation for teachers in high-need areas (e.g., low-performing schools, science, technology, engineering, and mathematics subjects)	84	53
Insufficient funding to provide performance-based compensation to all eligible teachers	83	57
Concerns or opposition from school staff or staff unions about performance-based compensation	59	73
Difficulty in measuring student growth for teachers of non-tested subjects	59	88
Restrictions in rules and regulations on how educators can be compensated	56	74
Concerns or opposition from school staff or staff unions about evaluating educators based, at least in part, on student achievement	50	80
Lack of clear state education agency guidance or support on educator compensation or evaluation system	36	78
Restrictions in rules and regulations on how educators can be evaluated	36	84
Lack of district staff capacity or expertise to conduct comprehensive educator performance evaluations	26	85
Lack of district staff capacity or expertise to develop reliable approaches for rating educator performance-based, in part, on student achievement	22	78
Current data systems make linking student test data to individual teachers difficult	19	88
Lack of district staff capacity or expertise to identify professional development needs of teachers based on performance evaluations	10	87

Table Reads: In 2011-12, 84 percent of the districts rating this challenge perceived insufficient funding to provide differential compensation for teachers in high-need areas as a major challenge to implementing educator evaluation and compensation systems. Fifty-three percent of districts rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Districts rating the challenge excludes districts that identified the challenge as not applicable and districts that did not respond to the question.

Notes: The percentages in this table are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix E provide confidence intervals for each percentage and the results of significance tests for comparisons of the percentages across challenges.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

School-Level Findings

This section first describes the study's school-level indicators of reform in the areas of educator hiring, evaluation, and compensation. We then use the indicators to describe schools' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Next, we compare the percentage of low-performing schools in which these reforms were implemented to the corresponding percentages among other schools. We conclude this section with a report of the major challenges experienced by schools carrying out the workforce development reforms, as reported in 2011-12 by schools. (See appendix E for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

School-Level Reform Indicators

While most educator workforce policies are made at the state and especially the district levels, these policies are not always implemented uniformly within districts. States or districts may pilot these reforms in only a subset of schools or target them toward low-performing schools as part of turnaround initiatives. In addition, the TIF and SIG programs encouraged districts to implement compensation and evaluation reforms in schools serving high-need students (for TIF, defined by the percentage of students from low-income families) or in low-performing schools (for SIG, defined in terms of state school accountability systems). In order to get a representative picture of the extent to which these reforms affected the nation's schools, we examined reform implementation at the school level, where reforms will most directly affect students. The four workforce reforms we report on at the school level in this chapter are whether:

- Teachers in the school are being evaluated using multi-level rubrics, multiple observations, and student achievement gains;
- The principal was evaluated based in part on student achievement gains;
- Compensation for teachers at the school was differentiated based on student achievement gains; and
- Student achievement gains were used to make tenure, dismissal, or reassignment decisions for teachers at the school.

Implementation of Educator Workforce Development Reforms: 2011-12

- **Forty-nine percent of schools reported that principal evaluation was based on student achievement gains in 2011-12 (figure 4-6).**
- **Thirty-four percent of schools reported that teacher tenure, dismissal, or reassignment decisions used student achievement gains in 2011-12.**
- **Eighteen percent of the schools reported that teacher evaluation practices included multi-level rubrics, multiple observations, and student achievement gains in 2011-12.**

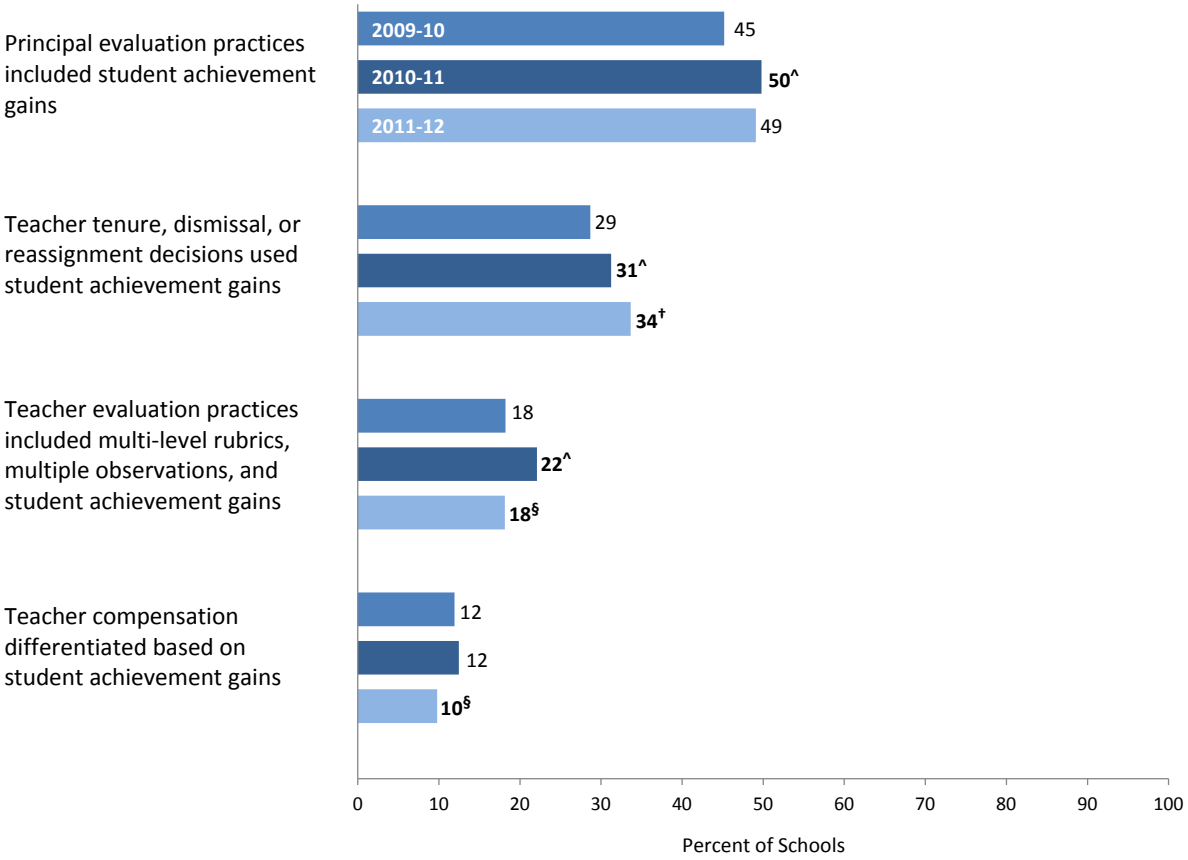
- **Ten percent of schools reported that teacher compensation was differentiated based on student achievement gains in 2011-12.**

Progress of Educator Workforce Development Reforms: 2009-10 to 2011-12

- **For only one reform (teacher tenure, dismissal, or reassignment decisions used student achievement gains), was there a statistically significant increase in the percentage of schools that implemented reforms in 2011-12 than did so in 2009-10 (figure 4-6).**

    - Thirty-four percent of schools reported that teacher tenure, dismissal, or reassignment decisions used student achievement gains in 2011-12 compared with 29 percent in 2009-10.

Figure 4-6. Percentage of schools that used student achievement gains for educator evaluation, compensation, and personnel decisions: 2009-10, 2010-11, and 2011-12



^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).
† Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).
§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).
Figure Reads: Forty-five percent of schools used principal evaluation practices in 2009-10 that included student achievement gains. In 2010-11, 50 percent of schools used such evaluation practices, and in 2011-12 49 percent of schools did so. The difference between the percentage for 2009-10 and the percentage for 2010-11 is statistically significant.
Notes: The percentages in this figure are cross-sectional estimates for the population of schools operating in the 2010-11 school year. The denominator for these percentages is the estimated number of districts with sufficient data (i.e., answered enough questions to calculate the indicator). See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix E provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages across indicators.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Implementation of Educator Workforce Development Reforms by School Performance Status: 2011-12

Improving the performance of students in low-performing schools is a pervasive theme in the Recovery Act's education provisions, in particular, RTT, SIG, and TIF. The workforce development reforms the act promoted are elements of the federal strategy to improve low-performing schools and to promote equitable access to effective educators for students in these schools. For example, educator evaluation and teacher compensation as strategies to improve low-performing schools is prominent in the SIG transformation school model for low-performing schools. We therefore compared the percentage of low-performing schools meeting the reform indicators in 2011-12 to the percentage of other schools.

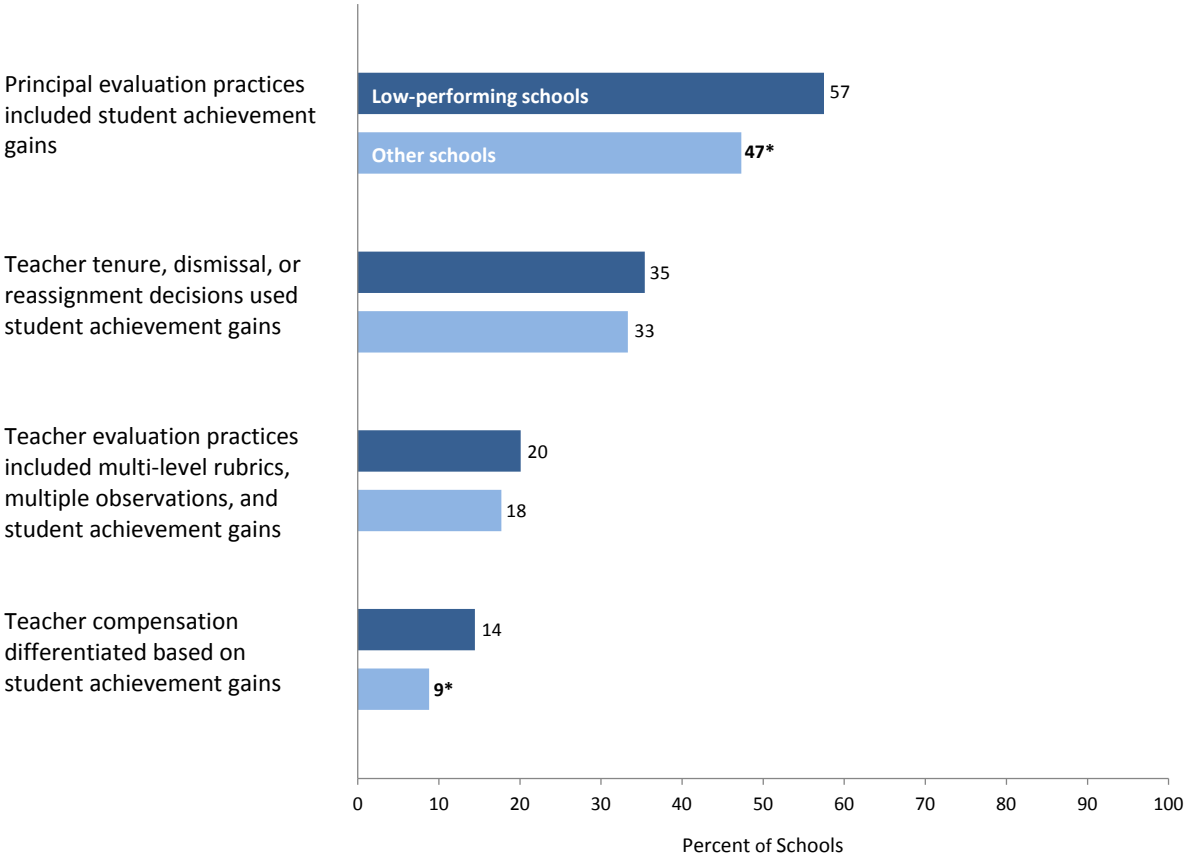
- **In 2011-12, student achievement gains were significantly more likely to be used in low-performing schools than in other schools to evaluate principals and to differentiate teacher compensation (figure 4-7).**

    - Fifty-seven percent of low-performing schools reported that principal evaluation practices included student achievement gains compared with 47 percent of other schools.

    - Fourteen percent of low-performing schools reported that teacher compensation was differentiated based on student achievement gains compared with 9 percent of other schools.

- **In 2011-12, there were no statistical differences between low-performing schools and other schools in terms of student achievement gains being used for teacher tenure, dismissal, or reassignment decisions or for teacher evaluation, including multi-level rubrics, multiple observations, and student achievement gains.**

Figure 4-7. Comparison of the use of student achievement gains for educator evaluation, compensation, and personnel decisions in low-performing schools and in other schools: 2011-12



* Percentage is significantly different from percentage for low-performing schools ($p < .05$).
Figure Reads: Fifty-seven percent of low-performing schools reported that their principal evaluation practices included student achievement gains in 2011-12. In contrast, 47 percent of all other schools did so. This difference is statistically significant.
Notes: The percentages in this figure are cross-sectional estimates for the population of schools operating in the 2010-11 school year. The denominator is the estimated number of schools in the performance status category (low performing, other) with sufficient data (i.e., answered enough questions to calculate the indicator). Low-performing schools include schools that were (1) in improvement, corrective action, or restructuring; (2) identified as among the lowest-achieving schools; or (3) have had a graduation rate below 60 percent over a number of years. Performance data obtained from approved state applications for School Improvement Grants. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix E provide confidence intervals for each percentage.
Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement Grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Challenges Associated With Implementing Educator Workforce Development Reforms: 2011-12

Like states and districts, schools also were asked about potential challenges in implementing the reforms promoted by the act. The challenges were similar to those we asked of districts, but modified to apply to the school context. As with SEAs and districts, a school did not report on a challenge if it did not use the relevant reform strategy.

- **Insufficient funding for differentiated compensation was the most frequent major challenge reported by schools rating this challenge in 2011-12 (table 4-3).**

    - Seventy-three percent of the schools perceived insufficient funding to provide performance-based compensation to all eligible teachers as a major challenge.

    - Seventy percent of the schools perceived insufficient funding to provide differential compensation for teachers in high-need areas as a major challenge.

- **Challenges related to educator compensation were more likely to be rated as major by schools rating these challenges than similar challenges related to educator evaluation in 2011-12.**

    - Concerns or opposition from school staff or staff unions about performance-based compensation was rated as a major challenge by 55 percent of the schools, while 41 percent of schools rated concerns or opposition about evaluating educators based on student achievement as a major challenge.

    - Restrictions in rules and regulations regarding how educators can be compensated was rated as a major challenge by 47 percent of the schools, while restrictions in rules and regulations regarding educator evaluation was rated as a major challenges by 23 percent of schools.

Table 4-3. Percentage of schools that reported major challenges when implementing educator evaluation and compensation systems: 2011-12

School challenge	Percent of schools	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Insufficient funding to provide performance-based compensation to all eligible teachers	73	49
Insufficient funding to provide differential compensation for teachers in high-need areas (e.g., STEM subjects)	70	47
Concerns or opposition from school staff or staff unions about performance-based compensation	55	64
Difficulty in measuring student growth for teachers of non-tested subjects	47	81
Restrictions in rules and regulations on how educators can be compensated	47	67
Concerns or opposition from school staff or staff unions about evaluating educators based, at least in part, on student achievement	41	74
Restrictions in rules and regulations on how educators can be evaluated	23	84
Lack of school staff capacity or expertise to conduct comprehensive educator performance evaluations	16	84
Lack of clear district guidance or support on educator compensation or evaluation system	15	71
Limited access to technology needed in order to link student test data to individual teachers	11	83
Lack of school staff capacity or expertise to identify professional development needs of teachers based on performance evaluations	8	86

Table Reads: In 2011-12, 73 percent of schools rating this challenge perceived insufficient funding to provide performance-based compensation to all eligible teachers as a major challenge when implementing educator evaluation and compensation systems. Forty-nine percent of schools rated this challenge.

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge.

[2] Schools rating the challenge excludes schools that identified the challenge as not applicable and schools that did not respond to the question.

Notes: The percentages in this table are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix E provide confidence intervals for each percentage and the results of significance tests for comparisons of the percentages across challenges.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Comparisons Across Levels

In this section, we point out similarities and differences among the three levels in the implementation of educator workforce reforms and the challenges perceived by those implementing them.

Progress of Educator Workforce Development Reforms: 2009-10 to 2011-12

Because most of the act's programs and funding affected states or required state-level action, we expected that progress in implementing the act's workforce development reforms might differ across the three levels of state, district, and school. It may take time for state-level policy changes, guidance, or technical assistance to have effects at the district and school levels. At the same time, however, some districts and schools may have been experimenting with reforms such as performance-based compensation for teachers before their state got involved. We therefore compared the overall level of progress among the levels.

- **While the number of SEAs that supported the educator workforce reforms related to principal evaluation, teacher evaluation, and teacher compensation increased between 2009-10 and 2011-12, the percentages of districts and schools implementing these reforms did not increase or decreased during this time (figures 4-1, 4-3, and 4-6).**

    - The number of SEAs reporting that they supported the use of student achievement gains for principal evaluation increased from 6 in 2009-10 to 22 by 2011-12, but the percentages of districts and schools doing so did not increase significantly.

    - The number of SEAs reporting that they supported the use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation increased from 1 in 2009-10 to 14 by 2011-12, but the percentages of districts and schools doing so did not significantly increase.

    - The number of SEAs reporting that they supported using student achievement gains to differentiate teacher compensation increased from 7 in 2009-10 to 15 by 2011-12; the percentage of districts differentiating compensation on this basis decreased significantly, and the percentage of schools in which compensation was so differentiated did not increase.

Challenges Associated With Implementing Educator Workforce Development Reforms: 2011-12

Because SEAs, districts, and schools all have somewhat different roles in implementing the educator workforce reforms promoted by the Recovery Act, each level of the system is likely to be faced with somewhat different challenges. Therefore, the study did not present the same list of potential challenges to respondents at each level. There are some challenges, however, that were common, and some similarities that are worth noting.

- **Difficulty measuring student growth for teachers of subjects with no standardized tests was rated as a major challenge at all three levels in 2011-12. This was the challenge most frequently rated as major by SEAs and was the fourth most frequently rated major challenge by districts and schools (tables 4-1, 4-2, and 4-3).**

    - Thirty-five of the 46 SEAs rating this challenge perceived difficulty in measuring student growth for teachers of nontested subjects as a major challenge.

    - Fifty-nine percent of the districts and 47 percent of the schools perceived difficulty in measuring student growth for teachers of nontested subjects as a major challenge.

- **At all three levels, concerns or opposition from educators about performance-based compensation were more likely to be rated as a major challenge than concerns or opposition about evaluation based on student achievement in 2011-12 (tables 4-1, 4-2, and 4-3).**

    - Twenty-four of the 34 SEAs rating this challenge, 59 percent of the districts, and 55 percent of the schools perceived concerns or opposition from educators or unions about performance-based compensation as a major challenge.

    - Twenty-four of the 47 SEAs rating this challenge, 50 percent of the districts, and 41 percent of the schools perceived concerns or opposition from educators or unions about evaluating educators based, at least in part, on student achievement as a major challenge.

- **Although not asked at the SEA level, large percentages of both districts and schools rated insufficient funding to provide performance-based compensation or differential compensation as major challenges (tables 4-2 and 4-3).**

    - Eighty-three percent of the districts and 73 percent of the schools perceived insufficient funding to provide performance-based compensation to all eligible teachers as a major challenge.

    - Eighty-four percent of the districts and 70 percent of the schools perceived insufficient funding to provide differential compensation for teachers in high-need areas (e.g., STEM subjects) as a major challenge.

This page intentionally blank.

Chapter 5: Improving Low-Performing Schools

Almost all of the education programs funded by the Recovery Act included a focus on improving low-performing schools. These programs offered a multi-pronged approach to improvement that included identifying and providing resources to these schools, and increasing the quality of their teachers and leaders. Many of the reform strategies promoted by these programs are not new, but built on decades of federal efforts to improve the achievement of students in high-poverty and low-performing schools. However, the sizable resources of the Recovery Act for turning around low-performing schools created new interest in these strategies and funded some new requirements.

Since the initial authorization of ESEA, the Title I, Part A program has provided funding to improve the educational opportunities and achievement of students in schools with the highest percentages or numbers of children from low-income families within each LEA. With the subsequent reauthorizations of ESEA in 1994 and 2001, federal policy evolved toward identifying and providing resources to low-performing schools through school accountability provisions. ESEA required SEAs and LEAs to identify Title I schools consistently not meeting achievement targets and, in turn, required those schools to develop improvement plans. ESEA also required LEAs to offer students at these schools the option of transfer to another public school in the district, including a charter school. More prescriptive requirements (e.g., extending instructional time, reopening as a public charter school, or replacing all or most of the staff) apply as the length of time that the school fails to meet achievement targets increases. The 2001 ESEA reauthorization (NCLB) also authorized the School Improvement Grant (SIG) program through which SEAs make sub grants to LEAs to help their low-performing schools comply with school improvement, restructuring, and corrective action requirements. SIG received its first appropriations in fiscal year 2007.

Other federal efforts to improve student achievement focused on improving the quality of teachers and encouraging the placement of highly qualified or effective teachers in high-need schools. NCLB included the requirement that all core academic subject teachers be highly qualified and, under Title II, Part A, provides funds to prepare, recruit, and retain highly qualified teachers in high-need schools. To help increase the pool of highly effective educators serving high-need schools, the TIF program, established in 2006, encourages districts to develop and implement in high-need schools compensation systems tied to teacher and principal performance.

The Recovery Act continued the federal policy of identifying and providing resources to low-performing schools,[55] but also brought attention, substantial resources, and intensive reform requirements to the PLA schools. These are the state's lowest-achieving 5 percent of schools and secondary schools with chronically low graduation rates.[56] The act provided an additional $3 billion for

[55] For example, the act provided $10 billion for Title I, Part A allowing the program to serve more students and improve the quality of services provided by implementing evidenced-based strategies to build capacity for improving teaching and learning in Title I schools (U.S. Department of Education, 2010c).

[56] PLA schools means, as determined by the state: (a) Any Title I school in improvement, corrective action, or restructuring that —(i) Is among the lowest-achieving five percent of Title I schools in improvement, corrective action, or restructuring or the lowest-achieving five Title I schools in improvement, corrective action, or restructuring in the State, whichever number of schools is greater; or (ii) Is a high school that has had a graduation rate that is less than 60 percent over a number of years; and (b) Any secondary school that is eligible for, but does not receive, Title I funds that —(i) Is among the lowest-achieving five percent of secondary schools or the lowest-achieving five secondary schools in the State that are eligible for, but do not receive, Title I funds, whichever number of schools is greater; or (ii) Is a high school that has had a graduation rate that is less

the SIG program. This large infusion of funds led to new program requirements. In general, SEAs are required to (1) identify PLA schools, (2) competitively award SIG funds to districts that commit to implementing specific intervention models, and (3) provide technical assistance to LEAs and participating schools. The required intervention models—the transformation, restart, closure, and turnaround models— focus on significant changes to a school such as leadership and staff changes, closure, or increased student learning time. These models required a more comprehensive approach to reform than the menu of strategies offered for schools in corrective action and restructuring under NCLB.[57] LEAs have the critical role of implementing the models and monitoring the progress of each SIG school. The SFSF and RTT programs also emphasized the focus on PLA schools, with roles for states to report on PLA schools or support the LEAs that are implementing the school intervention models.

Building upon previous efforts to ensure that qualified teachers teach students in high-need schools, the Recovery Act programs encouraged the equitable distribution of effective teachers and principals in schools. The RTT selection criteria considered state and district plans to ensure that students in high-need schools are taught by effective educators. SFSF required SEAs to report on the distribution of effective teachers. The act also increased funding for TIF, which enabled an increase in the number of grants for districts to develop compensation systems that could entice highly effective educators to serve in low-performing schools.

The Recovery Act also promoted a more favorable environment for public charter schools, potentially increasing the pool available for public school choice. Public charter schools were options for public school choice and restructuring provisions for low-performing schools under NCLB, and similar provisions exist under the SIG restart and school closure intervention models. However, through the SFSF and RTT programs, states were encouraged to remove prohibitions on the existence of charter schools and their numbers and to promote accountability for these schools.

As in the act's other assurance areas, fully realizing the act's intent to achieve major improvements in low-performing schools entails actions at state, district, and school levels. Each level has a somewhat different role, and the act's components varied in their emphasis on state, district, and school actions. To provide a picture of the prevalence and progress of the reforms promoted by the Act, we identified and examined indicators of reform at all three levels.

Using these indicators, this chapter describes the prevalence of reforms at all three levels in 2011-12, and, for SEAs and schools, progress from 2009-10 to 2011-12.[58] We also report on major challenges to implementing these reforms as perceived by survey respondents at each level. Our review of state implementation includes all states and their SEAs. At the district level, our reporting is limited to districts with at least one low-performing school in 2011-12. Similarly, at the school level, our reporting is limited to schools identified as low performing.[59] As done in previous chapters, this chapter also

---

than 60 percent over a number of years. (U.S. Department of Education, November 2010, Guidance on FY2010 School Improvement Grants, p. 1. downloaded from: http://www2.ed.gov/programs/sif/sigguidance11012010.pdf).

[57] For example, under NCLB, LEAs were required to take at least one of a set of corrective actions or restructuring arrangements for schools in corrective action or restructuring, respectively. The SIG intervention models required that schools undergo a series of reform actions.

[58] The analysis of districts with low-performing schools was limited to the 2011-12 school year for two reasons. First, districts were asked to report whether they had low-performing schools in 2010-11 and 2011-12 but were not asked about this status for 2009-10. Second, the size of the confidence intervals for analyses of 2010-11 data raised questions about the accuracy of the estimates.

[59] For this report, low-performing schools were identified through state FY 2010 SIG applications and include: (1) any ESEA Title I-eligible school designated for improvement, corrective action, or restructuring and (2) any high school, regardless of Title I

compares prevalence of reform during the final year of the study for those states that were awarded RTT grants and other states. However, district comparisons by district size and poverty level were not done because the size of the confidence intervals for these analyses of 2011-12 data raised questions about the accuracy of the estimates. Also, given the focus of the chapter, the school analyses are limited to low-performing schools. The chapter ends by comparing progress and challenges across levels.

Key Findings Across Levels

- **While the number of SEAs providing guidance on choosing and implementing school intervention models increased during the period to include all 51 SEAs in 2011-12, reports from low-performing schools and their districts suggest that relatively little use was made of key elements of the SIG closure, restart, and turnaround models (figures 5.1, 5.3, and 5.4a).**

- **Across levels, the implementation of compensation incentives to improve staffing at low-performing schools remained low during the study period (figures 5.1, 5.3, and 5.4a).**

- **Insufficient funding to make substantial changes to the school day or year was the second most frequently rated major challenge for districts and schools in 2011-12. At the state level, restrictions in rules and regulations regarding extension of the school day or year were not rated among the top two major challenges by SEAs in 2011-12 (tables 5.1, 5.2, and 5.3).**

- **Relatively few SEAs, districts, or schools reported lack of guidance or support from the governmental level on implementing school reform models as a major challenge in 2011-12.**

State-Level Findings

In this section, we first describe the study's state-level indicators of reform to improve low-performing schools. We then use the indicators to describe SEAs' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Next, we report on whether a greater percentage of RTT states implemented these reforms in 2011-12 compared with states that did not receive RTT grants. Last, we conclude this section with a report of the major challenges related to the improvement of low-performing schools, as reported in 2011-12 by SEAs.

funding or status, with a cohort graduation rate (i.e., percent of ninth graders who graduate within 4 or 5 years) less than 60 percent over the last several years.

State-Level Reform Indicators

Through Recovery Act programs, states have the responsibility to identify the lowest-performing schools across the state and create favorable conditions for charter schools. The programs also encouraged states to support districts as they direct implementation school intervention models by providing technical assistance and developing collaborative plans. As a result, we included four indicators at the state level. These are whether the SEA:

- Allowed expansion of the number of charter schools in the state;
- Provided guidance on choosing and implementing the school intervention models defined by ED;
- Monitored deployment of effective educators in low-performing schools; and
- Supported the use of compensation incentives to improve staffing in low-performing schools.

We included the expansion of charter school indicator because the RTT selection criteria gave preference to states that did not prohibit or inhibit an increase in the number of charter schools. In addition, SFSF reporting requirements for states included the number of charter schools permitted to operate under state law and the number of charter schools currently operating in the state.

The RTT selection criteria also included whether the state had a high-quality plan and ambitious targets to support districts in turning around low-performing schools by implementing one of the four SIG school intervention models. We included the indicator about guidance on choosing and implementing school intervention models because SEA assistance and guidance in this area is important as districts may have little experience in selecting such models.

The inclusion of our third SEA indicator, monitoring deployment of effective educators in low-performing schools, flows from the RTT selection criteria about whether the state, and its districts, had a plan to ensure the equitable distribution of these educators in high-poverty and high-minority schools. The plan also is to ensure that students in these schools are taught by effective educators. SFSF also required SEAs to report on the distribution of effective teachers. RTT state plans to promote the equitable distribution of effective educators could include the use of compensation incentives, therefore, we also included an indicator of states' support for such incentives to improve staffing in low-performing schools. See appendix B for the components, decision rules, and specific Recovery Act requirements embodied in each indicator.

Implementation of Reforms to Support Improvement in Low-Performing Schools: 2011-12

- **All 51 SEAs reported in 2011-12 that they provided guidance to districts on choosing and implementing the school intervention models defined by ED (figure 5.1).**
- **Thirty-three states' policies encouraged expansion in the number of charter schools in 2011-12 according to the National Alliance of Public Charter schools.**

- **Less than 15 SEAs reported in 2011-12 that they supported specific reforms to improve the quality of educators in low-performing schools including monitoring the deployment of effective educators in low-performing schools.**

    - Fourteen SEAs reported that they supported compensation incentives to improve staffing in low-performing schools.

    - Twelve SEAs reported that they monitored deployment of effective educators in low-performing schools.

Progress of Reforms to Support Improvement in Low-Performing Schools: 2009-10 to 2011-12

- **The number of SEAs reporting support for the school intervention models increased from 2009-10 to 2011-12, with nine more SEAs providing guidance and choosing and implementing the models by 2011-12 (figure 5-1).**

- **Fourteen more states allowed for expansion of the number of charter schools in 2011-12 than in 2009-10 (increased from 19 to 33 SEAs).**

- **The number of SEAs implementing reforms focused on improving educator quality increased from 2009-10 to 2011-12.**

    - Six more SEAs supported the use of compensation incentives to improve staffing at low-performing schools (increased from 8 to 14 SEAs).

    - Five more SEAs monitored deployment of effective educators in low-performing schools (increased from 7 to 12 SEAs).

Figure 5-1. Number of state education agencies (SEAs) that implemented reforms to support improvement in low-performing schools: 2009-10, 2010-11, and 2011-12

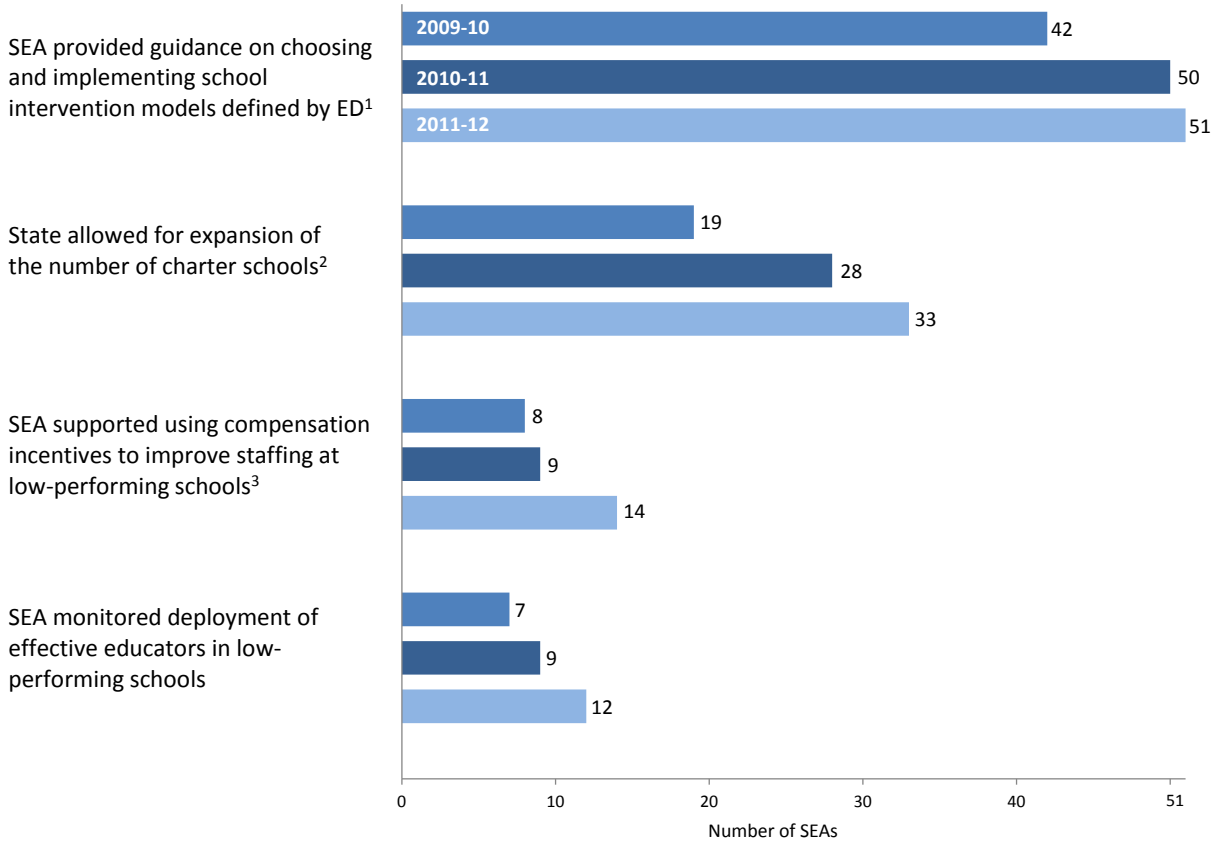


Figure Reads: Forty-two SEAs reported that in 2009-10 they provided guidance on choosing and implementing the school intervention models defined by ED. Fifty SEAs did so in 2010-11, and all SEAs did so in 2011-12.

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years. See appendix A for more information about how data for previous years were used in these indicators.

[2] In measuring state reform activity for this indicator, if in a previous year a state passed legislation to either increase the permissible number of charter schools or remove prohibitions on charter schools, the state is counted as meeting the indicator in subsequent years.

[3] To meet this indicator, SEAs not only had to play a role in supporting implementation, but also had to be supporting the specific types of systems that the Recovery Act explicitly identified. Two SEAs that met the indicator in 2010-11 are counted as meeting the indicator in 2011-12 given that their role in supporting implementation was a potentially ongoing or continued activity. See appendix A for more information about how data for previous years were used in these indicators.

Note: Respondents include 50 states and DC.

Sources: National Alliance for Public Charter Schools report: *Measuring up to the model: A ranking of state charter school laws* (2010 and 2011) for information on the expansion of charter schools and U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys for information on implementation of the school intervention models for low-performing schools, compensation incentives, and the movement and deployment of effective educators.

Implementation of Reforms to Support Improvement in Low-Performing Schools by State RTT Status: 2011-12

Recognizing the emphasis in the RTT program on state-level action to improve low-performing schools, we expected that by 2011-12, a higher percentage of states that had won RTT grants would have adopted and implemented the Recovery Act reforms focused on low-performing schools with other states. In addition, the resources available through the RTT grants could have helped to finance these SEAs' provision of supports for improving low-performing schools.

- **In 2011-12, states that received RTT grants were more likely than other states to have adopted policies that encouraged expansion in the number of charter schools.** Eleven of the 12 RTT states adopted policies that encouraged the expansion in the number of charter schools compared with 22 of the 39 other states (figure 5-2).

- **In 2011-12, SEAs in RTT states were more likely than other states to report that they supported reforms aimed at improving the quality of educators in low-performing schools.**

    - Seven of the 12 SEAs in RTT states reported that they supported the use of compensation incentives to improve staffing at low-performing schools compared with 7 of 39 SEAs in other states.

    - Five of the 12SEAs in RTT states reported that they monitored the deployment of effective educators in low-performing schools compared with 7 of the 39 SEAs in other states.

Figure 5-2. Comparison of the implementation of reforms to support improvement in low-performing schools in Race to the Top (RTT) states and in other states: 2011-12

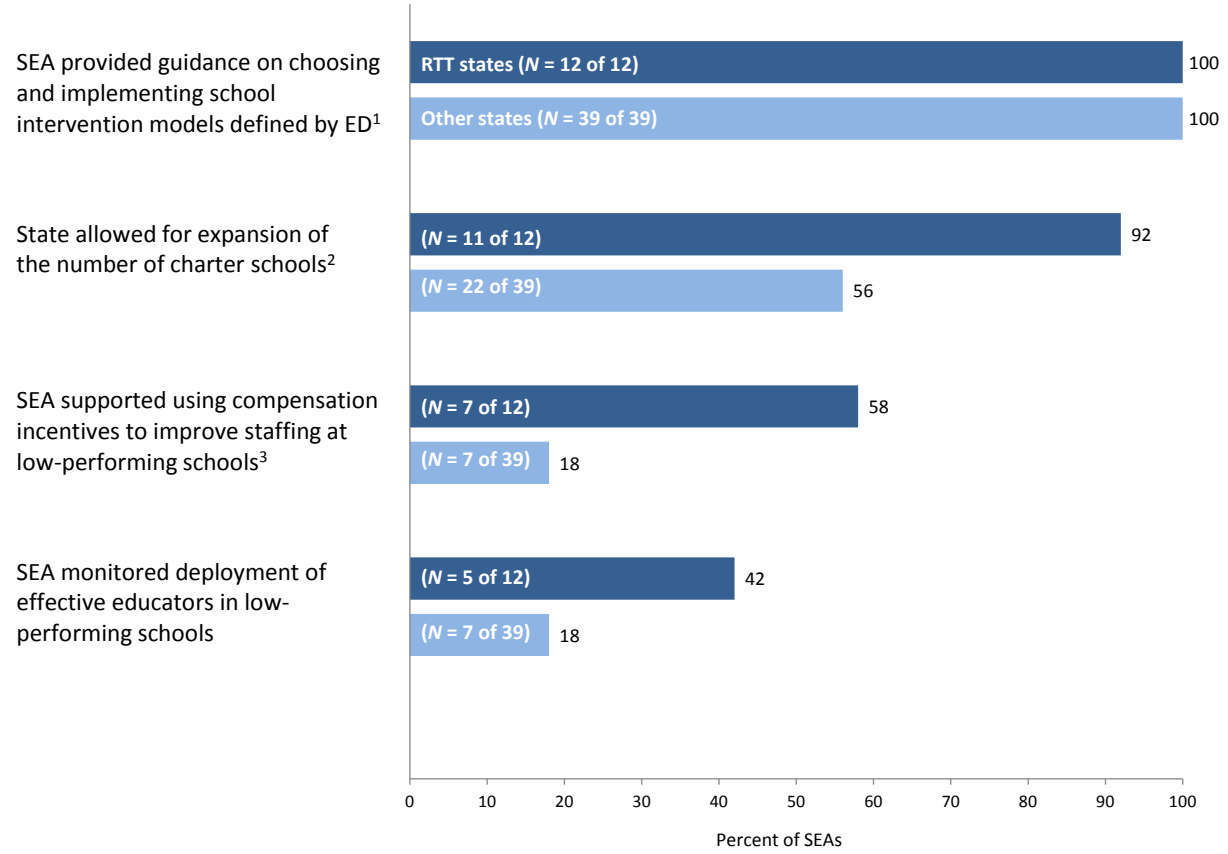


Figure Reads: All 12 state education agencies (SEAs) in RTT states and all 39 SEAs in other states reported that in 2011-12 they provided guidance on choosing and implementing the school intervention models defined by ED (100 percent).

[1] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years. See appendix A for more information about how data for previous years were used in these indicators.

[2] In measuring state reform activity for this indicator, if in a previous year a state passed legislation to either increase the permissible number of charter schools or remove prohibitions on charter schools, the state is counted as meeting the indicator in subsequent years.

[3] To meet this indicator, SEAs not only had to play a role in supporting implementation, but also had to be supporting the specific types of systems that the Recovery Act explicitly identified. Two SEAs that met the indicator in 2010-11 are counted as meeting the indicator in 2011-12 given that their role in supporting implementation was a potentially ongoing or continued activity. See appendix A for more information about how data for previous years were used in these indicators.

Notes: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN).

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

Challenges Associated With SEA Reforms to Support Improvement in Low-Performing Schools: 2011-12

SEAs that had adopted reforms to support low-performing schools were asked to report on the challenges associated with these reform efforts. An SEA did not report on challenges related to a particular reform strategy if it was not implementing that strategy.

- **The three of the four most frequently reported major challenges in 2011-12 concerned restrictions in rules and regulations affecting reform efforts (table 5-1).**

    - Fifteen of the 49 SEAs rating this challenge rated restrictions in rules and regulations regarding the extent of autonomy that districts and schools can be granted in terms of staffing or budgets as a major challenge.

    - Thirteen of the 45 SEAs rating this challenge rated restrictions in rules and regulations regarding teacher hiring practices as a major challenge.

    - Twelve of the 48 SEAs rating this challenge rated restrictions in rules and regulations regarding extension of the school day or year as a major challenge.

- **Concerns or opposition from educators about school closing or restructuring schools was rated as a major challenge by 13 of the 47 SEAs rating this challenge.**

- **Lack of SEA staff or expertise to help guide or develop district staff on reforms related to low-performing schools were rated as a major challenge by five or fewer SEAs rating these challenges. The few number of SEAs reporting lack of staff or expertise is notable because of findings from the National Assessment of Title I schools that reported that "most states (42) reported that providing assistance to all schools identified for improvement was a moderate or serious challenge in 2003-04"(Institute of Education Sciences, (2007), p. xxviii)**

Table 5-1. Number of state education agencies (SEAs) that reported major challenges in efforts to support improvement in low-performing schools: 2011-12

SEA challenge	Number of SEAs that reported challenge as a major challenge[1]	Total number of applicable SEAs[2]
Restrictions in rules and regulations regarding extent of autonomy that local education agencies and schools can be granted in terms of staffing or budgets	*15*	49
Restrictions in rules and regulations regarding teacher hiring practices	*13*	45
Concerns or opposition from educators about closing or restructuring schools	*13*	47
Restrictions in rules and regulations regarding extension of school day or year	*12*	48
Restrictions in rules and regulations regarding number of schools that can be closed, opened as charters, or restructured in other ways	*4*	38
Lack of SEA staff or expertise to provide guidance and technical assistance on whole-school reform or turnaround models to LEAs	*5*	51
Lack of SEA staff or expertise to provide professional development focused on improving low-performing schools	*4*	50
Lack of clear federal guidance or support focused on implementing whole-school reform or turnaround models	*3*	49
Lack of SEA staff or expertise to identify and disseminate best practices concerning improving low-performing schools	*3*	50
Lack of SEA staff or expertise to screen and disseminate information on EMOs, CMOs and school turnaround experts[3]	*1*	32

Table Reads: In 2011-12, 15 of the 49 SEAs rating this challenge perceived restrictions in rules and regulations regarding extent of autonomy that LEAs and schools can be granted in terms of staffing or budgets as a major challenge to supporting the improvement of low-performing schools.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable and SEAs that did not respond to the question.

[3] An EMO is an education management organization. A CMO is a charter management organization.

Note: Respondents include 50 states and DC.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

District-Level Findings

This section begins by describing the study's district-level indicators of reform to improve low-performing schools. We then use the indicators to describe districts' implementation of these reforms in 2011-12.[60] The analysis is limited to districts with at least one low-performing school. Last, we conclude this section with a report of the major challenges in supporting school improvement, as reported in 2011-12 by districts. (See appendix F for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

District-Level Reform Indicators

Low-performing schools are common in American districts, with 45 percent of all districts reporting in 2011-12 that one or more of their schools was low performing.[61] Districts play the central role in directing and monitoring the implementation of reforms intended for achieving significant improvement in low-performing schools, as emphasized under the act. At the district level, we included nine indicators of reform in areas over which the district generally has primary jurisdiction. They represent the major schooling changes promoted to improve student achievement in low-performing schools. These indicators are whether the district:

- Replaced principals and teachers in low-performing schools;
- Contracted with an external organization to operate low-performing schools;
- Provided compensation incentives to improve staffing at low-performing schools; and
- Provided technical assistance to low-performing schools to screen or select school improvement experts or models.
- Targeted low-performing schools for closure;
- Required low-performing schools to partner with organizations that specialize in instructional improvement;
- Provided school leaders in low-performing schools with staffing or budgeting flexibility to implement school reform;
- Extended the school day, week, or year in low-performing schools; and

[60] The analysis of districts with low-performing schools was limited to the 2011-12 school year, for two reasons. First, districts were asked to report whether they had low-performing schools in 2010-11 and 2011-12 but were not asked about this status for 2009-10. Second, the size of the confidence intervals for analyses of 2010-11 data raised questions about the accuracy of the estimates.

[61] For this report, low-performing schools include: (1) any ESEA Title I-eligible school designated for improvement, corrective action, or restructuring and (2) any high school, regardless of Title I funding or status, with a cohort graduation rate (i.e., percent of ninth graders who graduate within 4 or 5 years) less than 60 percent over the last several years.

- Implemented programs in low-performing schools to encourage family and community involvement.

All nine of these indicators are components of the four SIG school intervention models included in the SIG program regulations that stemmed from the increase in funds from the Recovery Act. They are as follows:

- **Turnaround model**, which entails replacement of the school principal; screening and rehiring no more than 50 percent of existing staff; providing appropriate social-emotional and community-oriented services and supports for students; and installation of new procedures to improve staff competencies, school governance, curricula, data use, and accountability and to increase learning time;

- **Restart model**, which entails conversion of a school or LEA to charter school status or to operation by an education management organization;

- **School closure**, which entails closing the low-performing school and enrolling the school's students in other, higher performing schools; and

- **Transformation model**, which includes many of the methods outlined for the turnaround model but also includes options for the school to offer additional compensation to staff, measure changes in instructional practices, and ensure that the school is not required to accept a teacher without the mutual consent of the teacher and principal (regardless of the teacher's seniority). This model also allows districts to use SIG resources to create community-oriented schools. In addition, the model requires districts to deliver (or facilitate the delivery of) ongoing, intensive technical assistance and related support from the district, the SEA, or an external partner organization, such as a school turnaround organization or an education management organization.

Implementation of Reforms to Support Improvement in Low-Performing Schools: 2011-12

- **Among districts with one or more low-performing schools, the most common support for low-performing schools in 2011-12 reported by 78 percent of districts was implementing programs that encouraged family and community involvement (figure 5-3; see appendix table F-3 for results of statistical comparisons of differences across indicators).**

- **The next most common group of reforms in 2011-12 reported by 40 to 50 percent of these districts included providing technical assistance to low-performing schools to screen or select school-improvement experts or models; extending the school day, week, or year; and requiring low-performing schools to partner with external organizations (figure 5-3).**

    - Fifty percent of these districts provided technical assistance to low-performing schools to screen or select school improvement experts or models.

- Forty percent of these districts reported that they extended the school day, week, or year in low-performing schools.

- Thirty-nine percent reported that they required low-performing schools to partner with organizations that specialize in instructional improvement.

- **Less than a quarter of districts with low-performing schools reported in 2011-12 that they implemented the other reforms the study tracked.**

  - Twenty-three percent of districts with low-performing schools reported that they provided school leaders in these schools with staffing or budgeting flexibility to implement school reform.

  - Sixteen percent of these districts reported that they provided compensation incentives to improve staffing at low-performing schools.

  - Five percent of districts with one or more low-performing schools reported in 2011-12 that district policies or programs called for replacing both the principal and a substantial proportion of teachers in the district's low-performing schools.

    - However, when examining policies or programs to replace principals and teachers separately, an additional 11 percent of districts with low-performing schools had adopted policies or programs to replace principals in individual low-performing schools but had not adopted corresponding policies or programs for replacing a substantial proportion of teachers (appendix table F-1).

  - Small percentages of districts reported that they contracted with an external organization to operate low-preforming schools (3 percent) or targeted low-performing schools for closure (2 percent).

Figure 5-3. Percentage of districts with low-performing schools that implemented reforms to support improvement in low-performing schools: 2011-12

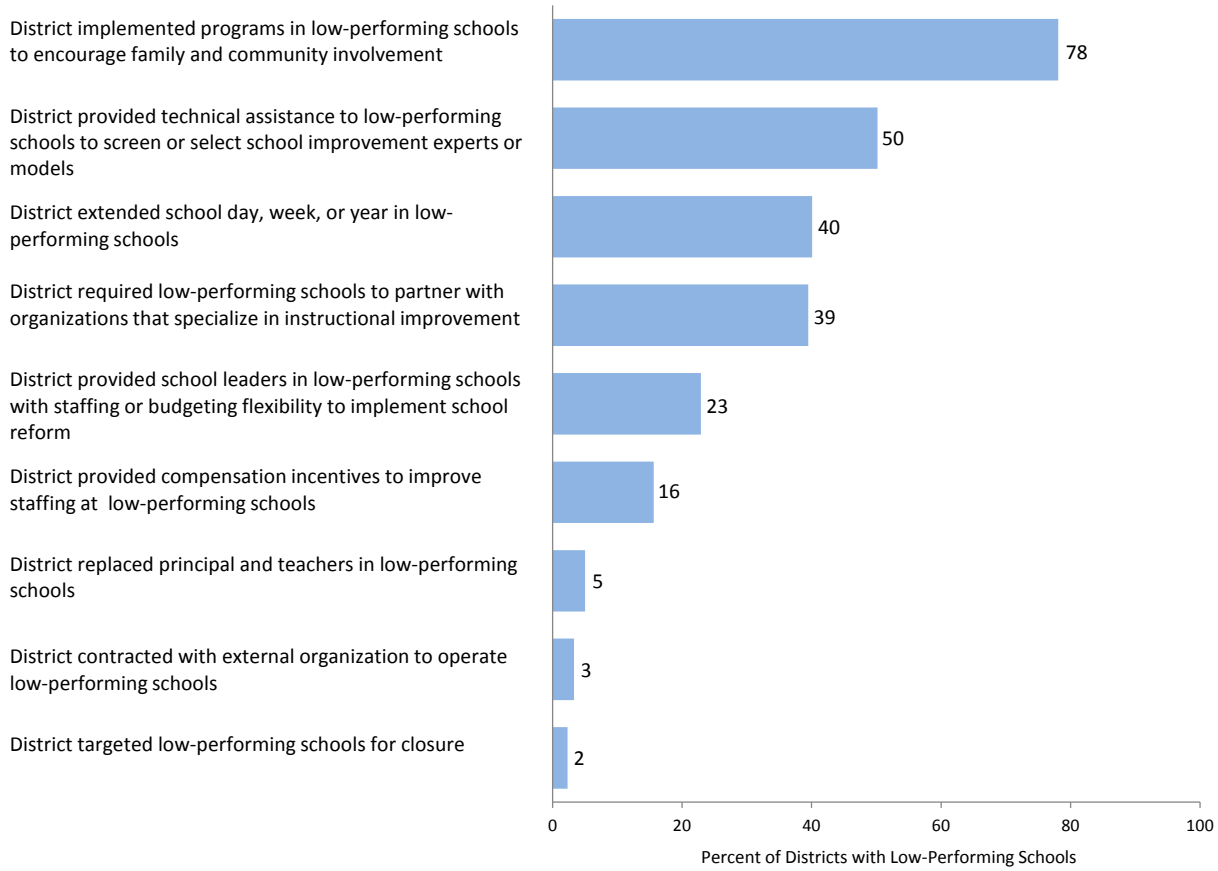


Figure Reads: Seventy-eight percent of districts with low-performing schools reported that in 2011-12 they implemented programs to encourage family and community involvement.
Notes: The percentages in the figure are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year and have low-performing schools. Low-performing schools include: (1) any ESEA Title I-eligible school designated for improvement, corrective action, or restructuring and (2) any high school, regardless of Title I funding or status, with a cohort graduation rate (i.e., percent of ninth graders who graduate within 4 or 5 years) less than 60 percent over the last several years. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator is the estimated number of districts with sufficient data (i.e., answered enough questions to calculate the indicator) that reported in the evaluation's 2012 district survey they had low-performing schools in that year. Detailed tables in appendix F provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages across indicators.
Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Challenges for Districts in Supporting School Improvement: 2011-12

Districts with low-performing schools reported on the major challenges that they experienced in supporting school improvement. In implementing strategies to improve low-performing schools, districts may decide to redesign school operations and personnel policies, often by opening doors to new schools and new sources of schooling expertise. Yet, even when the community agrees that improvements are needed, such changes can sometimes be unpopular and difficult to achieve. Some of the reforms, such as extending the school day or providing school improvement experts, can also require additional funds. As with SEAs, a district did not report on challenges related to a particular reform strategy if it was not implementing that strategy.

- **Among districts with one or more low-performing schools, insufficient funding for a reform effort was reported most frequently as a major challenge among districts rating these challenges in 2011-12 (table 5-2).**

    - Sixty-five percent reported that insufficient funding to implement whole-school or turnaround intervention models was a major challenge.

    - Fifty-seven percent reported that insufficient funding to make substantial changes to school day or year schedules was a major challenge.

- **The quality of data systems and lack of evidence about the effectiveness of school models were reported least frequently as a major challenge among districts rating these challenges in 2011-12.**

    - Ten percent of districts reported that difficulty in tracking the success of school improvement efforts with current data systems was a major challenge.

    - Nine percent of districts reported that a lack of evidence about effectiveness of school improvement models was a major challenge.

Table 5-2. Percentage of districts with low-performing schools that reported major challenges when supporting school improvement: 2011-12

District challenge	Percent of districts	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Insufficient funding to implement whole-school or turnaround intervention models	65	65
Insufficient funding to make substantial changes to school day or year schedules	57	80
Restrictions in rules and regulations regarding extent of autonomy that schools can be granted in terms of staffing or budgets	48	68
Insufficient funding to support school-based experts (outside consultants, instructional specialists or coaches, mentors)	45	93
Insufficient funding to support special programs for students and families	41	92
Concerns or opposition from parents or community groups about closing or restructuring schools	41	50
Restrictions in rules and regulations regarding extension of school days or years	40	68
Insufficient help from local social services and other community-based organizations in providing services to students and their families	38	87
Restrictions in rules and regulations regarding number of schools that can be closed, opened as charters, or restructured in other ways	33	27
Lack of district staff capacity or expertise to screen or provide guidance or advice about EMOs and CMOs[3]	31	32
Unwillingness of high-performing teachers to move to low-performing schools	30	38
Lack of district staff capacity or expertise to provide guidance or advice concerning whole-school or turnaround intervention models	29	66
Lack of evidence about performance of CMOs or EMOs or other intervention experts[3]	22	32

continued

Table 5-2. Percentage of districts with low-performing schools that reported major challenges when supporting school restructuring and improvement: 2011-12 (cont'd)

District challenge	Percent of districts	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Lack of clear state education agency guidance or support focused on adoption of whole-school reform models	15	54
Lack of district staff capacity or expertise to train instructional specialists, coaches, lead teachers, or school-based professional development staff	15	94
Current data systems make tracking the success of school improvement efforts difficult	10	96
Lack of evidence about effectiveness of school improvement models	9	77

Table Reads: In 2011-12, 65 percent of the districts with low-performing schools rating this challenge perceived insufficient funding to implement whole-school or turnaround intervention models as a major challenge to supporting school restructuring and improvement. Sixty-five percent of district with low-performing schools rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Districts rating the challenge excludes districts that identified the challenge as not applicable, districts that did not respond to the question, and districts without low-performing schools.

[3] An EMO is an education management organization. A CMO is a charter management organization.

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year and have low-performing schools. Low-performing schools include: (1) any ESEA Title I-eligible school designated for improvement, corrective action, or restructuring and (2) any high school, regardless of Title I funding or status, with a cohort graduation rate (i.e., percent of ninth graders who graduate within 4 or 5 years) less than 60 percent over the last several years. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix F provide confidence intervals for each percentage.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

School-Level Findings

This section first describes the study's school-level indicators of reform to stimulate improvement in low-performing schools. We then use the indicators to describe low-performing schools' implementation of these reforms in 2011-12 and progress from 2009-10 to 2011-12. Last, we conclude this section with a report of major challenges reported by low-performing schools in 2011-12 as they worked to implement these reforms. (See appendix F for confidence intervals for each percentage reported in this section and the results of statistical tests to determine if certain reforms or challenges were more common than others in 2011-12.)

School-Level Reform Indicators

In 2011-12, 18 percent of the nation's public schools were identified as low performing.[62] In the effort to achieve improvements in low-performing schools, the schools themselves have distinct opportunities and responsibilities to carry out the improvement strategies and models. The study examined 11 school-level indicators of reform. We examined so many indicators because so many improvement strategies have been advocated for and applied to low-performing schools. Nine of the 11 indicators cover practices required or permitted in one or more of the SIG school intervention models. One indicator, reassigning effective teachers as part of restructuring, was proposed by ED as a remedy for unequal access to effective educators, most recently in the Administration's 2010 blueprint for re-authorizing the ESEA (U.S. Department of Education, 2010b). The other indicator, using outside school improvement experts, is a strategy that has been recommended and used for many years (e.g., Stringfield, Ross, and Smith, 1996).

Three indicators focus on parents, families, and communities and on students' social-emotional development. These include whether the school implemented programs to:

- Encourage family and community involvement;
- Address students' social and emotional needs; and
- Orient parents to school improvement models.

Four indicators focus on school scheduling or organization. These include whether the school:

- Modified the daily schedule to increase instructional time in reading/English language arts or mathematics;
- Used outside school improvement experts as part of school restructuring or to improve instruction;

[62] For this report, low-performing schools include schools that were (1) in improvement, corrective action, or restructuring, (2) identified as among the lowest-achieving schools, or (3) have had a graduation rate below 60 percent over a number of years. Performance data obtained from approved state applications for FY 2010 SIG. See the methodology appendix for more information.

- Extended the school day, week, or year as part of school restructuring; and

- Received increased staffing or budgetary autonomy as part of school restructuring.

Implementation of Reforms to Support Improvement in Low-Performing Schools: 2011-12

- **Reforms involving programs for families or communities and addressing the social and emotional needs of students were the most common, with over three-quarters of low-performing schools in 2011-12 reporting implementation (figure 5-4).**

    - Ninety-eight percent of these schools reported that they implemented programs to encourage family and community involvement.

    - Ninety-one percent reported that they implemented programs to address students' social and emotional needs.

    - Seventy-nine percent reported that they implemented programs to orient parents to school improvement models.

- **Of the reforms relating to scheduling and organization, increasing instructional time and using outside school improvement experts were the most commonly reported in 2011-12 by low-performing schools.**

    - Modifying the daily schedule to increase instructional time for reading/English language arts or mathematics (78 percent) and the use of outside school improvement experts as part of school restructuring or to improve instruction (66 percent) were reported most frequently.

    - Less frequently reported were extending the school day, week, or year (19 percent) or increasing school autonomy in staffing or budgeting (9 percent) as part of restructuring efforts.

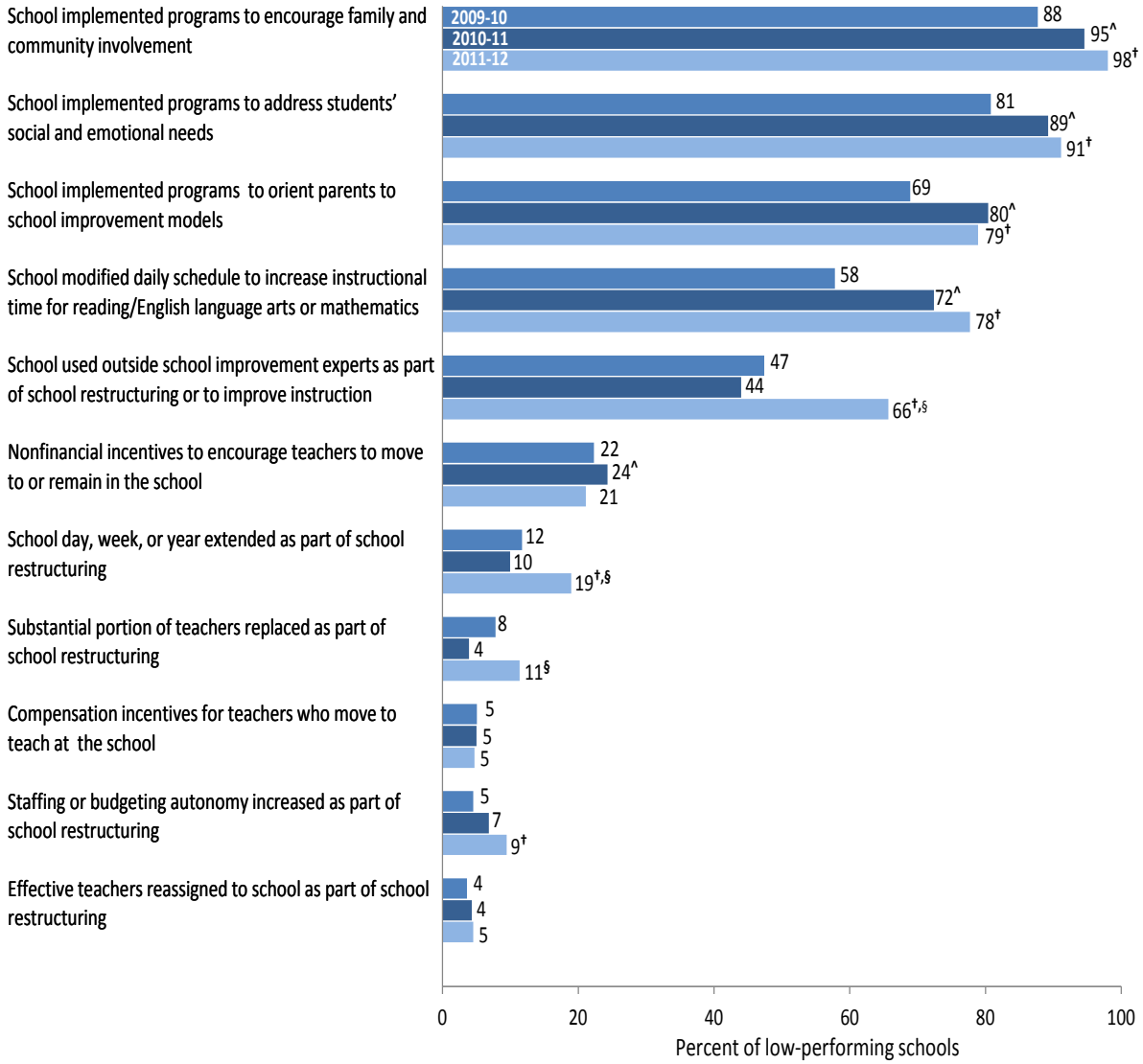
- **Small percentages of low-performing schools (5 to 21 percent) reported in 2011-12 that they implemented reforms to improve the teacher workforce through nonfinancial incentives, teacher replacement, compensation incentives, or reassignment.**

    - Twenty-one percent of low-performing schools reported that nonfinancial incentives were used to encourage teachers to move to or remain in the school.

    - Eleven percent of low-performing schools reported that a substantial portion of teachers were replaced as part of school restructuring.

    - The use of compensation incentives to encourage teachers who move to teach at the school and reassignment of effective teachers to the school as part of school restructuring were reported by 5 percent of low-performing schools.

Figure 5-4. Percentage of low-performing schools that supported improvement: 2009-10, 2010-11, and 2011-12



^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < .05$).

†Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < .05$).

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < .05$).

Figure Reads: Eighty-eight percent of low-performing school reported that in 2009-10 they implemented programs to encourage family and community involvement. Ninety-five percent of low-performing schools implemented such programs.in 2010-11, and 98 percent did so in 2011-12.

Notes: The percentages in the figure are cross-sectional estimates for the population of low-performing schools that were operating in the 2010-11 school year. Low-performing schools include schools that were (1) in improvement, corrective action, or restructuring; (2) identified as among the lowest-achieving schools; or (3) have had a graduation rate below 60 percent over a number of years. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator is the estimated number of low-performing schools with sufficient data (i.e., answered enough questions to calculate the indicator). Detailed tables in appendix F provide confidence intervals for each percentage and the results of significance tests for comparisons of the 2011-12 percentages across indicators.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys. Approved state applications for School Improvement Grants for low-performing schools data. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Progress of Reforms to Support Improvement in Low-Performing Schools: 2009-10 to 2011-12

- **The percentage of low-performing schools that implemented programs to increase family and community involvement and parent awareness of school improvement models increased significantly over the 3-year period (figure 5-4).**

    - A greater percentage of low-performing schools reported that they implemented programs to encourage family and community involvement in 2011-12 (98 percent), compared with 2009-10 (88 percent).

    - A greater percentage reported that they implemented programs to orient parents to school improvement models in 2011-12 (79 percent), compared with 2009-10 (69 percent).

    - A greater percentage of low-performing schools reported in 2011-12 that they implemented programs to address students' social and emotional needs than did so in 2009-10 (91 percent, compared with 81 percent).

- **Reforms relating to scheduling and organization were reported by significantly greater percentages of low-performing schools in 2011-12 than in 2009-10.**

    - The percentage of low-performing schools that reported that they modified the daily schedule to increase instructional time for reading/English language arts or mathematics increased from 58 percent in 2009-10 to 78 percent in 2011-12.

    - The percentage of low-performing schools reporting that they used school improvement experts as part of school restructuring or to improve instruction increased from 47 percent in 2009-10 to 66 percent in 2011-12.

    - The percentage that reported that they extended the school day, week, or year as part of school restructuring increased from 12 percent in 2009-10 to 19 percent in 2011-12.

    - The percentage of low-performing schools reporting that staffing or budgeting autonomy increased as part of school restructuring increased significantly from 5 percent in 2009-10 to 9 percent in 2011-12.

- **The percentage of low-performing schools implementing reforms affecting the teacher workforce in order to support school improvement did not change significantly from 2009-10 to 2011-12.**

Challenges for Low-Performing Schools When Working on School Organization and Improvement: 2011-12

Low-performing schools reported on the challenges experienced in implementing the reforms promoted by the act in the areas of school organization and improvement. Schools potentially faced many of the same challenges as districts, such as restrictions on or lack of funding for, structural or programmatic reforms, or opposition from the community. As with SEAs and districts, a school did not report on a challenge if it did not use the relevant reform strategy.

- **The major challenge cited by the largest percentage of low-performing schools was restrictions in rules and regulations on replacing less effective teachers, as reported by 49 percent of the low-performing schools rating this challenge (table 5-3).**

- **Insufficient funding to make substantial changes to school day or year schedules was reported as a major challenge by 45 percent of low-performing schools.**

- **The challenge least frequently rated as major was concern or opposition from parents or community groups about reform activities, which was rated as a major challenge by 9 percent of low-performing schools.**

Table 5-3. Percentage of low-performing schools that reported major challenges when working on school organization and improvement: 2011-12

School challenge	Percent of schools	
	Reported challenge as a major challenge[1]	Rating the challenge[2]
Restrictions in rules and regulations on replacing less effective teachers	49	76
Insufficient funding to make substantial changes to school day or year schedules	45	73
Insufficient funding to support special programs for students and families	37	83
Restrictions in rules and regulations on making substantial changes to school day or year schedules	36	75
Insufficient funding to support school-based experts (outside consultants, instructional specialists or coaches, mentors)	36	83
Insufficient funding to purchase technology for classroom use	32	82
Insufficient help from local social services and other community-based organizations in providing services to students and their families	22	82
Lack of clear district guidance or support focused on staffing or budgeting decisions made at the school level	20	77
Lack of school staff capacity or expertise to effectively use technology to improve instruction	19	82
Lack of clear district guidance or support focused on implementing a whole-school intervention or turnaround model	17	69
Concerns or opposition from parents or community groups about reform activities	9	75

Table Reads: In 2011-12, 49 percent of low-performing schools rating this challenge perceived restrictions in rules and regulations on replacing less effective teachers as a major challenge to school organization and improvement. Seventy-six percent of low-performing schools rated this challenge.

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge.

[2] Schools rating the challenge excludes schools that identified the challenge as not applicable, schools that did not respond to the question, and schools that were not low performing.

Notes: The percentages in the table are cross-sectional estimates for the population of low-performing schools that were operating in the 2010-11 school year. Low-performing schools include schools that were (1) in improvement, corrective action, or restructuring; (2) identified as among the lowest-achieving schools; or (3) have had a graduation rate below 60 percent over a number of years. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix F provide confidence intervals for each percentage.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement grants. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Comparisons Across Levels

In this section, we point out similarities and differences among the SEA, district, and school levels in the progress of reform implementation for improving low-performing schools and in the challenges experienced by those implementing these reforms.

Reforms to Support Improvement in Low-Performing Schools: 2009-10 to 2011-12

We examined the pattern of implementation across state, district, and school levels of two types of reforms for which we had related indicators at all three levels: implementation of the SIG school reform models and the use of compensation incentives to attract educators to low- performing schools.

- **While the number of SEAs providing guidance on choosing and implementing school intervention models increased during the period to include all 51 SEAs in 2011-12, reports from low-performing schools and their districts suggest that relatively little use was made of key elements of the SIG closure, restart, and turnaround models (figures 5-1, 5-3, and 5-4a).**

    - Among districts with low-performing schools, the percentage reporting targeting schools for closure was 2 percent for 2011-12; the percentage contracting with external organizations to operate low-performing schools (expected under the SIG restart model) was 3 percent; and the percentage replacing the principal and teachers (expected under the SIG turnaround model) was 5 percent.

    - At the school level, the percentage of low-performing schools reporting that a substantial number of teachers were replaced was 11 percent and had not increased significantly between 2009-10 and 2011-12, as would be expected if more use was being made of the turnaround model.

- **Across levels, the implementation of compensation incentives to improve staffing at low-performing schools remained low during the study period (figures 5-1, 5-3, and 5-4a).**

    - Between 2009-10 and 2011-12, SEAs reporting supporting compensation incentives to improve staffing at low-performing schools increased from 8 to 14 SEAs in 2011-12.

    - Sixteen percent of districts with low-performing schools reported in 2011-12 that they provided compensation incentives to improve staffing in low-performing schools.

    - Five percent of the low-performing schools reported the use of compensation incentives for teachers who move to teach at the school, and there had been no increase between 2009-10 and 2011-12.

Challenges Associated With Reforms to Support Improvement in Low-Performing Schools: 2011-12

Because responsibilities and opportunities for improving low-performing schools differ for SEAs, districts with low-performing schools, and the low-performing schools themselves, each level of the system is likely to experience different challenges in implementing reforms to improve low-performing schools. For this reason, the study did not present the same list of possible challenges to SEAs, districts, and schools. However, challenges related to school time extension and guidance and support in implementing school reform models were presented to respondents across all three levels.

- **Insufficient funding to make substantial changes to the school day or year was the second most frequently rated major challenge for districts and schools in 2011-12. At the state level, restrictions in rules and regulations regarding extension of the school day or year were not rated among the top two major challenges by SEAs in 2011-12 (tables 5-1, 5-2, and 5-3).**
    - Twelve of the 48 SEAs rating the challenge) reported that restrictions in rules and regulations regarding extension of the school day or year was a major challenge.
    - Among districts with one or more low-performing schools, 57 percent rated insufficient funding to make substantial changes to school day or year schedules as a major challenge.
    - Among low-performing schools, 45 percent rated insufficient funding to make substantial changes to school day or year schedules as a major challenge.
- **Relatively few SEAs, districts, or schools reported lack of guidance or support from the governmental level on implementing school reform models as a major challenge in 2011-12.**
    - Three of the 49 SEAs rating the challenge reported that lack of clear federal guidance or support focused on implementing whole-school reform or turnaround models was a major challenge.
    - Fifteen percent of districts reported that lack of clear SEA guidance or support focused on adoption of whole-school reform models was a major challenge.
    - Seventeen percent of low-performing schools reported that lack of clear district guidance or support focused on implementing a whole-school intervention or turnaround model was a major challenge.

This page intentionally blank.

Chapter 6: Breadth of Reform Across Assurance Areas

As described in the previous chapters, implementation across the reform areas varied considerably. More SEAs implemented reforms in the area of standards and assessment than in educator evaluation and compensation. District and school findings were similar to the state level for standards and assessments, but were less aligned in other reform areas. In the area of educator workforce development, across the three years surveyed, fewer districts and schools implemented reforms differentiating teacher compensation based on student achievement.

Furthermore, in examining findings by selected state, district, and school characteristics, we found that, as expected, states that received RTT awards were more likely than other states to implement reforms across the assurance areas in 2011-12.[63] (Although state implementation of reforms in the areas of standards and assessments, and data systems was generally high across all states.) In keeping with expectations, large districts were significantly more likely than small and medium size districts to implement reforms across the assurance areas.[64] However, in contrast to expectations, the study found generally no significant differences between high-poverty and other districts in the implementation of reforms related to the assurance areas.[65] Low-performing schools were significantly less likely than other schools to report implementing two of the three reforms examined related to standards and assessments, but were significantly more likely than other schools to report using longitudinal data to track student achievement gains and use these gains to evaluate principals and to differentiate teacher compensation.

The four assurance areas of the Recovery Act were intended to constitute an integrated, comprehensive vision of educational improvement.[66] Many of the reforms promoted by the act were intended to be mutually reinforcing. Ideally, all of these reforms would be implemented at all three levels of the system. Over time, more reforms in each assurance area should be implemented at each level, and larger numbers or percentages of states, districts, and schools should be implementing multiple reforms across all the assurance areas. In this chapter, we examine the extent to which states, districts, and schools implemented multiple reforms across assurance areas over the period of the study. We report on the degree to which progress in implementing the reforms varied across assurance areas

[63] Because states received RTT awards based, in part, on their actual and planned implementation of reforms similar to those included in the Recovery Act, we hypothesized that these states to be farther ahead on these reforms, compared with other states, by 2011-12. Large districts were hypothesized to have greater district-wide administrative capacity to support educational operations and educational change to help support the Recovery Act reforms than small or medium-sized districts. We hypothesized that high-poverty districts were more likely to be implementing reforms promoted by the Recovery Act given additional federal funds directly linked to incidence of poverty and experience complying with related federal requirements.

[64] As a reminder, the district-level analysis of reforms to support improvement in low-performing schools was limited to districts with low-performing schools. We did not analyze the data for districts with low-performing schools by district size and district poverty status.

[65] The few exceptions were that high-poverty districts were significantly more likely than other districts to differentiate teacher compensation based on student achievement gains, but were significantly less likely than other districts to be aware of state adoption of the CCSS and to provide professional development on new or revised standards for educators who teach or mentor mathematics or reading/ELA.

[66] While the intent of the act was that states, districts, and schools would implement reforms in all of the assurance areas, the report does not address whether state, district, or school implementation of more reforms constitutes an integrated and comprehensive reform approach.

and among the findings for SEAs, districts, and schools. We also report the total number of reform indicators met across assurance areas for each level and look across the assurance areas and determine whether there was variation in the reforms implemented by district and school characteristics. Finally, we examined challenges across the assurance areas and report on whether percentage of SEAs rating challenges as major differed for states that received an RTT grant compared with those that did not.[67]

Progress of Reforms Across Time and Level

- **The prevalence of Recovery Act reforms increased in all assurance areas at the state level, but implementation progress was slower and more uneven across districts and schools.**

    - At the state level, the number of SEAs that reported implementing reforms increased between 2009-10 and 2011-12 in all assurance areas for all but two of the indicators the study tracked (table 6-1). The greatest increase among the indicators measures was SEA support for use of student achievement gains for principal evaluation (from 6 in 2009-10 to 22 in 2011-12).

    - At the district level, the only assurance area with a significant increase in the percentage of districts that reported implementing reforms is standards and assessment, where there was an increase in the percentage of districts meeting three of the four indicators (table 6-2).[68] In the educator workforce development area, there was a significant decrease in the percentage of districts that reported implementing reforms for three of the five indicators.

    - At the school level, for all indicators, there were significant increases over time in the percentage of schools that reported implementing reforms related to standards and assessment and data systems, but in educator workforce development, there was a significant increase in just one of the indicators (table 6-3).

    - Among low-performing schools, there were significant increases in the percentage of schools that reported implementing 7 of the 11 reforms aimed at supporting school improvement.

- **The most progress on the reform indicators we tracked was made in the standards and assessments assurance area.**

    - There was an increase in the number of states meeting each indicator in this assurance area, a significant increase in the percentage of districts meeting three of the four indicators, and a significant increase in the number of schools meeting each indicator.

[67] At the district level, we examined reports of major challenges by district size and poverty status. We examined school reports of major challenges by performance status. These analyses did not identify clear patterns and are not part of this report.

[68] This analysis was not performed for the indicators of support for low-performing schools at the district level because the 2011 survey did not collect data about which districts had low-performing schools in 2009-10.

Table 6-1. Change in the number of states that implemented reforms, by assurance area and indicator

Indicator by assurance area	Change between 2009-10 and 2011-12[1]		
	Decrease	No change	Increase
Standards and assessments			
State had adopted the Common Core State Standards in mathematics and reading/English language arts			X
State was a member of a federally funded consortium developing assessments aligned to the Common Core State Standards			X
State education agency (SEA) provided, guided, or funded professional development on the Common Core State Standards[2]			X
SEA provided instructional materials or curriculum assistance for the Common Core State Standards[2]			X
Data systems			
SEA facilitated educators' access to assessment data			X
SEA provided professional development or technical assistance to support educators' use of assessment data[2]			X
State data system had ability to link teachers to student data		X	
State operated a longitudinal data system that included 12 core components		X	
Educator workforce development			
SEA simplified/shortened educator licensure process or authorized non-university preparation programs[2]			X
SEA issued standards or guidelines for teacher preparation programs[2]			X
SEA issued standards or guidelines for principal preparation programs[2]			X
SEA supported differentiating teacher compensation based on student achievement gains[3]			X
SEA supported use of student achievement gains for principal evaluation[3]			X
SEA supported use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation[3]			X

continued

Table 6-1. Change in the number of states that implemented reforms, by assurance area and indicator (cont'd)

Indicator by assurance area	Change between 2009-10 and 2011-12[1]		
	Decrease	No change	Increase
Support for low-performing schools			
SEA provided guidance on choosing and implementing school intervention models defined by ED[2]			X
State allowed for expansion of the number of charter schools[4]			X
SEA supported using compensation incentives to improve staffing at low-performing schools[3]			X
SEA monitored deployment of effective educators in low-performing schools			X

Table reads: The number of SEAs that adopted the Common Core State Standards in mathematics and reading/English language arts increased from 2010-11 to 2011-12.

[1] For the standards and assessments indicators, change is from 2010-11 to 2011-12 because before 2010-11, the Common Core State Standards were not yet available. For two data systems indicators—state data system had ability to link teachers to student data and state operated a longitudinal data system that included 12 core components—change is from 2009-10 to 2010-11 because the data were not available for 2011-12. For all other assurance areas, change is from 2009-10 to 2011-12.

[2] In measuring state reform activity for this indicator, if an SEA reported that it took action in a previous year, the state is counted as meeting the indicator in subsequent years.

[3] To meet this indicator, SEAs not only had to play a role in supporting implementation, but also had to be supporting the specific types of systems that the Recovery Act explicitly identified.

[4] In measuring state reform activity for this indicator, if in a previous year a state passed legislation to either increase the permissible number of charter schools or remove prohibitions on charter schools, the state is counted as meeting the indicator in subsequent years.

Note: Respondents include 50 states and DC.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys and, for information on the expansion of charter schools, National Alliance for Public Charter Schools report: *Measuring Up to the Model: A Ranking of State Charter School Laws* (2010 and 2011).

Table 6-2. Change in the percentage of districts that implemented reforms, by assurance area and indicator[1]

Indicator by assurance area	Change between 2009-10 and 2011-12[2]		
	Significant decrease	No significant change	Significant increase
Standards and assessments			
District aware of state adoption of Common Core State Standards			X
District provided professional development on new or revised state content standards on instructional strategies for teachers to help English learners or students with disabilities master the content standards		X	
District provided professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language Arts			X
District distributed instructional materials or provided selection guidance on curricula aligned with the new or revised state content standards			X
Data systems			
District provided educators with access to assessment data		X	
District provided educators with professional development on the use of assessment data for instructional planning		X	
District used longitudinal data to track student achievement gains for individual teachers		X	
Educator workforce development			
District provided school leaders with professional development or flexibility to hire effective teachers	X		
District used student achievement gains for teacher tenure, dismissal, or assignment decisions	X		
District operated a principal evaluation system that included student achievement gains		X	
District operated a teacher evaluation system that included multi-level rubrics, multiple observations, and student achievement gains		X	
District differentiated teacher compensation based on student achievement gains	X		

Table Reads: The percentage of districts that were award of state adoption of the Common Core State Standards increased significantly from 2010-11 to 2011-12.

[1] This analysis does not include indicators of support for low-performing schools at the district level because the 2011 survey did not collect data about which districts had low-performing schools in 2009-10.

[2] For the standards and assessments indicators, change is from 2010-11 to 2011-12 because before 2010-11, the Common Core State Standards were not yet available. For all other assurance areas, change is from 2009-10 to 2011-12.

Notes: The change status is based on cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Table 6-3. Status of change in the percentage of schools that implemented reforms, by assurance area and indicator

Indicator by assurance area	Change between 2009-10 and 2011-12[1]		
	Significant decrease	No significant change	Significant increase
Standards and assessments			
Teachers received professional development on new or revised state content standards			X
Teachers received professional development targeted to help English learners or students with disabilities master new or revised state content standards			X
School used curriculum or curriculum materials aligned with new or revised state content standards			X
Data systems			
School used student assessment data to identify students for additional support			X
Teachers had online access to student assessment results			X
School used student assessment data to tailor instruction			X
School used longitudinal data to track student achievement gains for individual teachers			X
Educator workforce development			
Principal evaluation practices included student achievement gains		X	
Teacher tenure, dismissal, or reassignment decisions used student achievement gains			X
Teacher evaluation practices included multi-level rubrics, multiple observations, and student achievement gains		X	
Teacher compensation differentiated based on student achievement gains		X	

continued

Table 6-3. Status of change in the percentage of schools implementing reforms, by assurance area and indicator (cont'd)

Indicator by assurance area	Change between 2009-10 and 2011-12		
	Significant decrease	No significant change	Significant increase
Improvement strategies in place[2]			
Nonfinancial incentives to encourage teachers to move to or remain in the school		X	
Substantial portion of teachers replaced as part of school restructuring		X	
Compensation incentives for teachers who move to teach at the school		X	
Effective teachers reassigned to school as part of school restructuring		X	
School modified daily schedule to increase instructional time for reading/English language arts or mathematics			X
School used outside school improvement experts as part of school restructuring or to improve instruction			X
School day, week, or year extended as part of school restructuring			X
Staffing or budgeting autonomy increased as part of school restructuring			X
School implemented programs to encourage family and community involvement			X
School implemented programs to address students' social and emotional needs			X
School implemented programs to orient parents to school improvement models			X

Table Reads: There was no significant change from 2010-11 to 2011-12 in the percentage of schools that reported that teachers received professional development on new or revised state content standards.

[1] For the standards and assessments indicators, change is from 2010-11 to 2011-12 for districts in states that adopted Common Core State Standards. Before 2010-11, the Common Core State Standards were not available. For all other assurance areas, change is from 2009-10 to 2011-12.

[2] For the support for improvement indicators, change is based only on low-performing schools.

Notes: The change status is based on cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Breadth of Reform at the State Level

The more reforms a state implemented, the more that state is likely to be moving toward a comprehensive program of reform consistent with the act's vision. We examined the breadth of reform by counting the total number of indicators met by each state.

- **States vary widely in the number of reforms they have implemented. Two years after enactment of the Recovery Act, implementation of the reform indicators ranged from two states meeting all 18 indicators to two states meeting 5 of the 18 (figure 6-1).**

- **The median number of indicators met by 2011-12 was 11 of 18.**

Figure 6-1. Total number of reform indicators met by state, 2009-10 to 2011-12

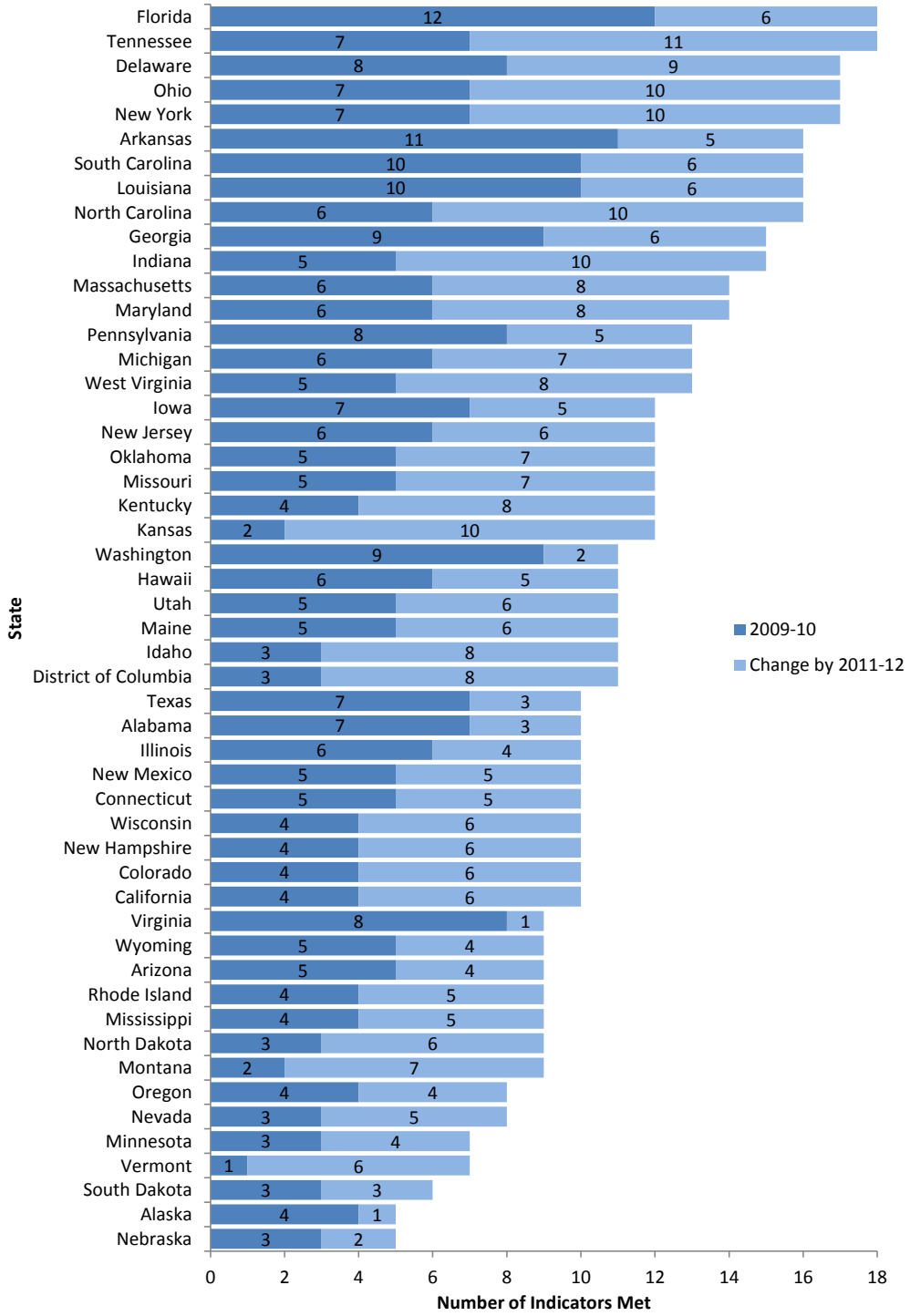


Figure Reads: In 2009-10, Florida met 12 reform indicators. By 2011-12, Florida met six more reform indicators. Thus, Florida met all possible reform indicators by 2011-12.

Note: The maximum number of indicators was 14 in 2009-10 and 18 in 2011-12. For two data systems indicators, data were not available for 2011-12. The change by 2011-12 reflects the status of these indicators in 2010-11.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agency Surveys. National Alliance for Public Charter Schools report: *Measuring Up to the Model: A Ranking of State Charter School Laws* (2010 and 2011).

Breadth of Reform at the District and School Levels, 2011-12

As at the state level, the more reforms implemented by districts and schools, the more fully the act's reform agenda is likely to be realized. We examined the breadth of reform at the district and school levels by charting the percentages of districts and schools that met different numbers of the indicators of reform in 2011-12, from all to none.

Because districts without low-performing schools and schools that were not low performing would not be expected to implement many of the reforms related to the low-preforming schools assurance area, we looked first at the subset of indicators that apply to all schools and districts (those from the standards and assessment, data systems, and educator workforce assurance areas) and then separately at those related to supporting low-performing schools. We also examined the results from the district and school subgroup analyses across assurance areas to determine if there are patterns in the types of districts and schools implementing reforms in 2011-12.

Findings

- **Only a small minority of districts and schools (5 percent or fewer) implemented all or almost all of the reforms we examined related to standards and assessment, data systems, and educator workforce development.**[69]

    - One percent of districts met all indicators from these three assurance areas, and 3 percent met at least 11 of the 12 (figure 6.2).

    - The median number of indicators met by districts across these assurance areas was 6 of the 12 we examined.

    - One percent of schools met all of the indicators, and 4 percent of schools met 10 of the 11 (figure 6.3).

    - The median number of indicators met by schools was 6 of 11.

- **Only a small percentage of districts with low-performing schools (less than 2 percent) met all or almost all of the indicators representing reforms aimed at supporting school improvement (figure 6-4).**

    - Less than 1 percent of these districts met all indicators in this assurance area, and 1 percent met at least eight of the nine indicators.

    - Seventeen percent of these districts did not meet any of the indicators relating to supporting low-performing schools.

    - The median number of indicators pertaining to low-performing schools that these districts met was two of the possible nine.

[69] Appendix tables G.1 and G2 provide the percentage of districts and schools that implemented all or almost all of the reforms in 2009-10.

- **Among the low-performing schools, less than 1 percent met all the indicators pertaining to school improvement in 2011-12, and 1 percent met at least 10 of the 11 indicators (figure 6-5).**[70]

    - Eight percent of these schools met none of the indicators.

    - The median number of indicators implemented was 5 of the 11 we examined.

- Large districts were significantly more likely than medium and small districts to report that they were implementing reforms in 2011-12 in the standards and assessments, data systems, and educator workforce development assurance areas. For all but one reform indicator, a greater percentage of large districts met the indicator than medium and small districts (figures 2-5, 3-5, and 4-5).

- There were no consistent patterns in reform implementation across the assurance areas by district poverty and low-performing school status.

[70] Appendix table G.5 provides the percentage of low performing schools that implemented all of the indicators pertaining to school improvement in 2009-10.

Figure 6-2. Percentage of districts that implemented reforms in standards and assessments, data systems, and educator workforce development in 2011-12, by number of indicators met

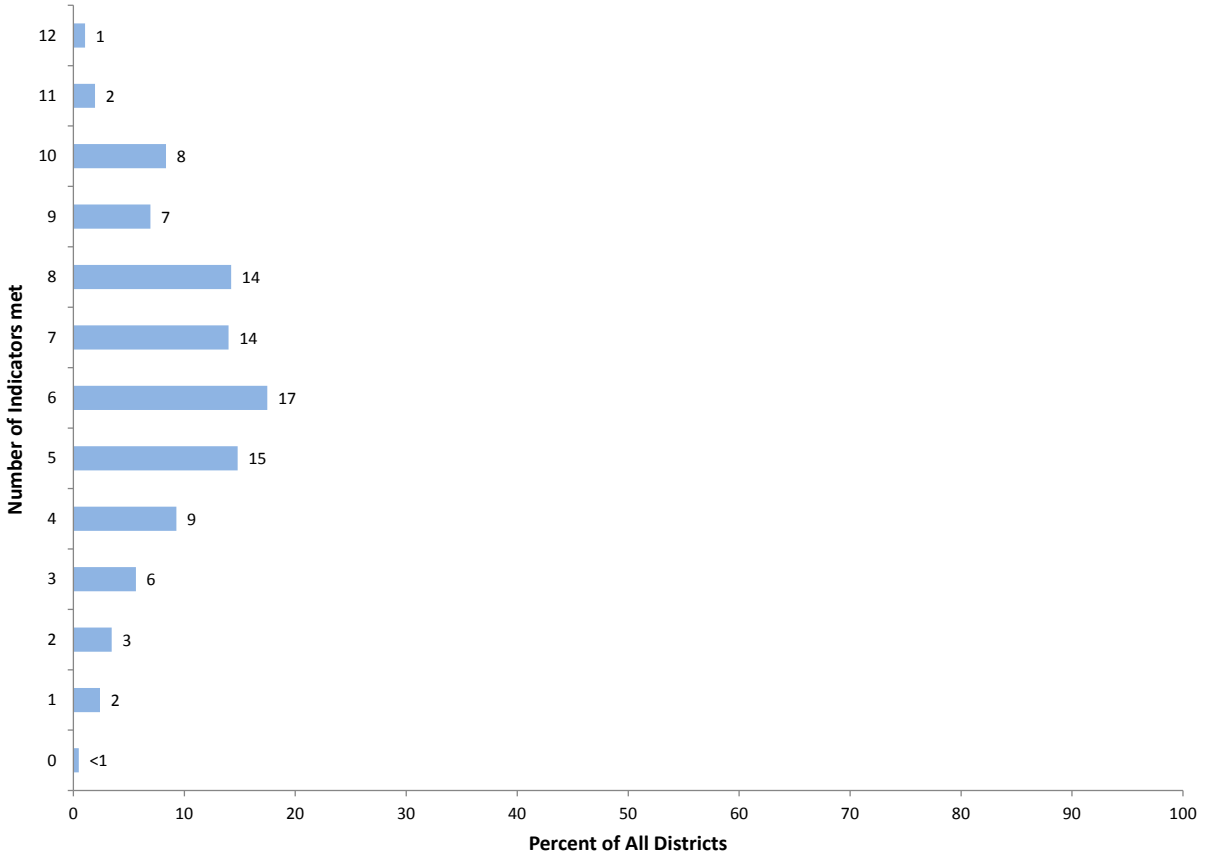


Figure Reads: In 2011-12, 1 percent of districts met all 12 reform indicators in the areas of standards and assessments, data systems, and educator workforce development.
Notes: The percentages in the figure are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix G provide confidence intervals for each percentage.
Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Figure 6-3. Percentage of schools that implemented reforms in standards and assessments, data systems, and educator workforce development in 2011-12, by number of indicators met

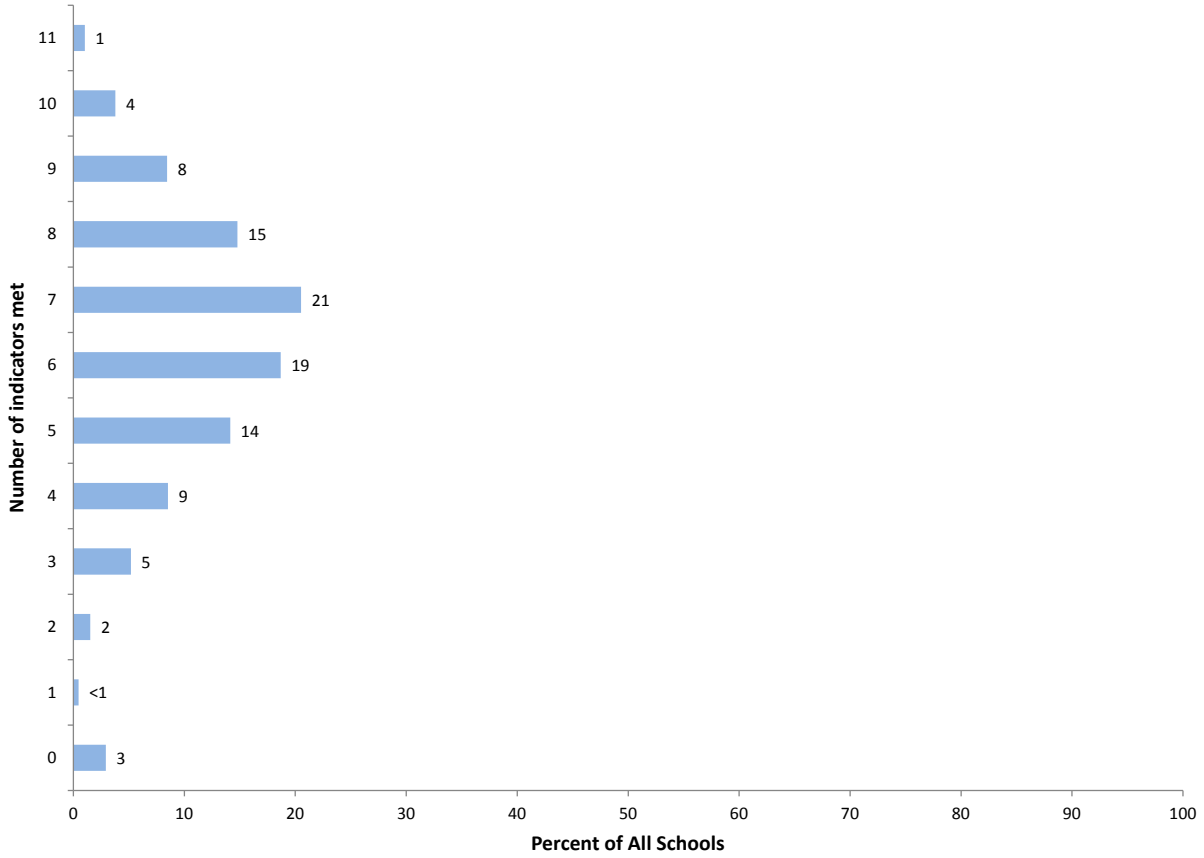


Figure Reads: In 2011-12, 1 percent of schools met all 11 reform indicators in the areas of standards and assessments, data systems, and educator workforce development.
Notes: The percentages in the figure are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix G provide confidence intervals for each percentage.
Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Figure 6-4. Percentage of districts with low-performing schools that implemented school improvement reforms in 2011-12, by number of indicators met

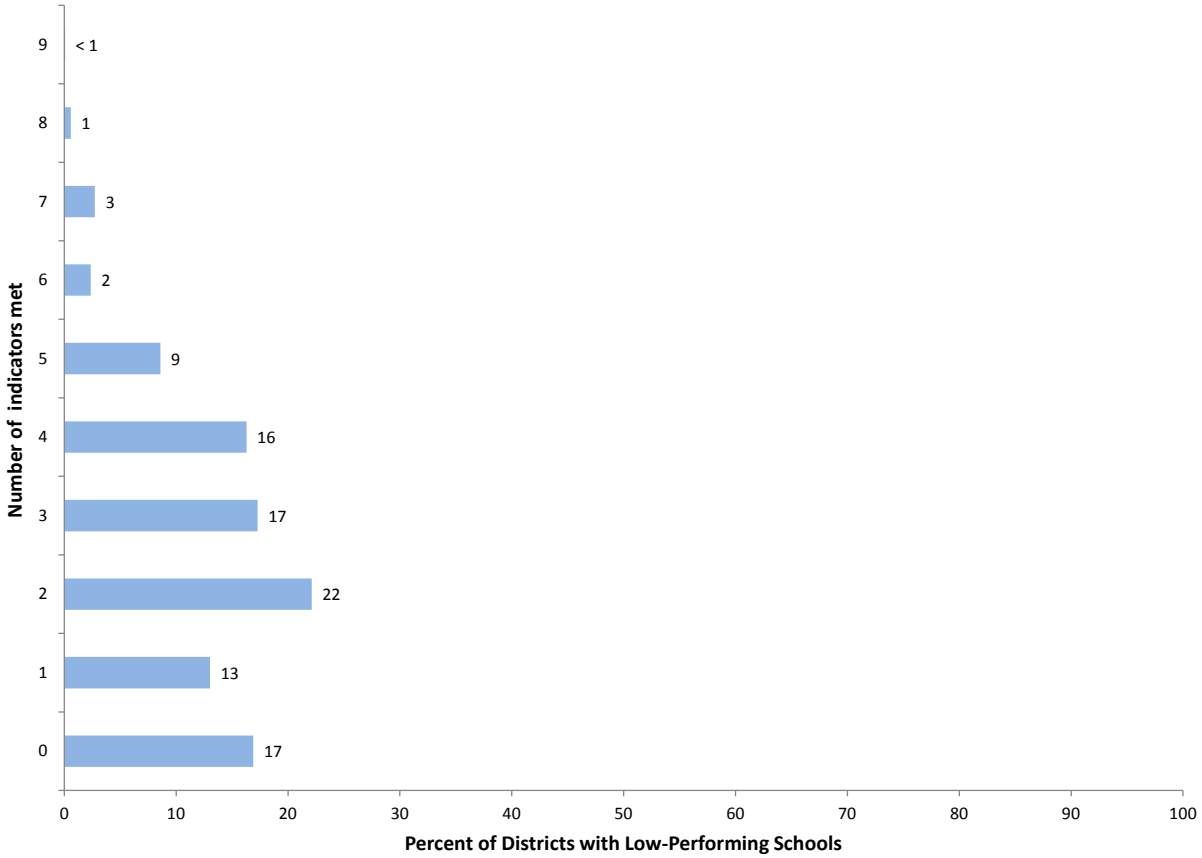


Figure Reads: In 2011-12, less than 1 percent of districts with low-performing schools met all nine reform indicators in the area support for low-performing schools.
Notes: The percentages in the figure are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year and have low-performing schools. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix G provide confidence intervals for each percentage.
Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Figure 6-5. Percentage of low-performing schools that supported school improvement in 2011-12, by number of indicators met

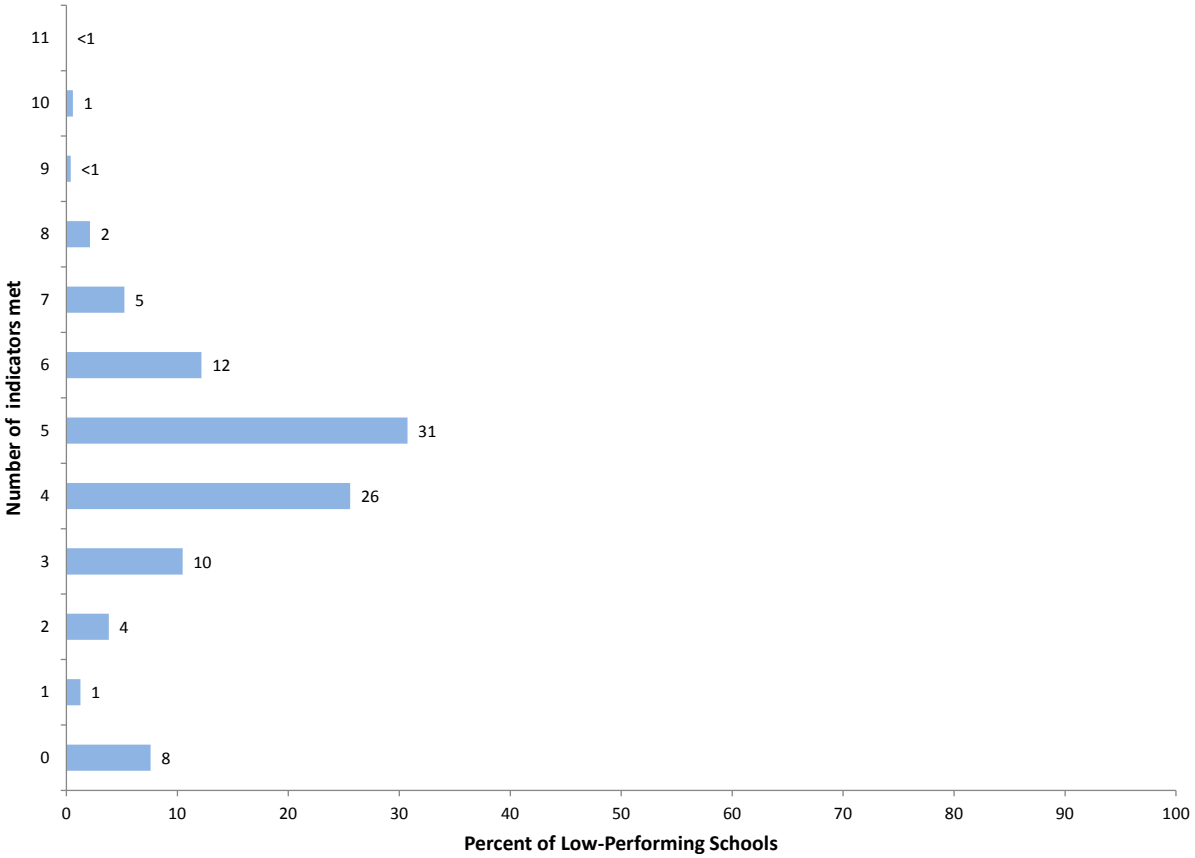


Figure Reads: In 2011-12, less than 1 percent of low-performing schools met all 11 reform indicators in the area of school improvement.
Notes: The percentages in the figure are cross-sectional estimates for the population of low-performing schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix G provide confidence intervals for each percentage.
Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

State Challenges by Race to the Top Status, 2011-12

The study also investigated whether the percentage of SEAs rating challenges as major differed for states that received an RTT grant compared with those that did not.[71] We hypothesized that a smaller percentage of SEAs in RTT states would rate challenges as major in 2011-12 because they were more prepared to respond to challenges due to their prior experience implementing the reforms[72] and the resources provided by the grant.

Findings

- **In the area of standards and assessments, with the exception of challenges not perceived as major by any SEA, smaller percentages of SEAs in RTT states rated challenges as major challenges compared with SEAs in other states that adopted CCSS (table 6-4). Differences ranged from 3 to 32 percentage points.**

- **When implementing data systems reforms, similar or smaller percentages of SEAs in RTT states rated challenges using data to support reform as major challenges compared with SEAs in other states (table 6-5). Differences ranged from 1 to 31 percentage points.**

- **Most educator workforce reform challenges also were rated as major by a lower percentage of RTT SEAs (by 1 to 29 percentages points), with one notable exception (table 6-6).**

    - SEAs in RTT states were considerably more likely than SEAs in other states to report lack of SEA staff or expertise to develop reliable and fair methods for a statewide system of educator performance evaluation based partly on student achievement as a major challenge (30 percentage points higher).

- **In contrast to the findings above, in the support for improving low-performing schools area, similar or larger percentages of SEAs in RTT states rated challenges as major compared with SEAs in other states (differences ranged from 1 to 21 percentage points), with one exception (table 6-7).**

    - SEAs in RTT states were less likely than SEAs in other states to report concerns or opposition from educators about closing or restructuring schools (13 percentage points lower).

[71] At the district level, we examined reports of major challenges by district size and poverty status. We examined school reports of major challenges by performance status. These analyses did not identify clear patterns and are not part of this report.

[72] See table 6-1 of Webber, A., Troppe, P., Milanowski, A., Gutmann, B., Reisner, E., and Goertz, M. (2014).

Table 6-4. Percentage of state education agencies (SEAs) in states that adopted the Common Core State Standards (CCSS) that reported major challenges when implementing new or revised state content standards and aligned assessments, by RTT status: 2011-12

	SEAs that reported challenge as a major challenge[1]		Applicable SEAs[2]	
SEA challenge	RTT states	Other states	RTT states	Other states
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards	40% (N = 4 of 10)	55% (N = 12 of 22)	83% (N = 10 of 12)	65% (N = 22 of 34)
Lack of instructional materials aligned with the new or revised state content standards	45% (N = 5 of 11)	48% (N = 14 of 29)	92% (N = 11 of 12)	85% (N = 29 of 34)
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing instructional materials aligned with the new or revised state content standards	25% (N = 3 of 12)	50% (N = 13 of 26)	100% (N = 12 of 12)	76% (N = 26 of 34)
Lack of assessments to measure student mastery of the new or revised state content standards	18% (N = 2 of 11)	50% (N = 12 of 24)	92% (N = 11 of 12)	71% (N = 24 of 34)
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on implementing new or revised state content standards	17% (N = 2 of 12)	45% (N = 14 of 31)	100% (N = 12 of 12)	91% (N = 31 of 34)
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on implementing new state assessments	20% (N = 2 of 10)	41% (N = 7 of 17)	83% (N = 10 of 12)	50% (N = 17 of 34)
Opposition from educators or other groups to the new or revised state content standards	0% (N = 0 of 12)	0% (N = 0 of 31)	100% (N = 12 of 12)	91% (N = 31 of 34)
Opposition from educators or other groups to the new or revised state assessments	0% (N = 0 of 11)	0% (N = 0 of 23)	92% (N = 11 of 12)	68% (N = 23 of 34)

Table Reads: In 2011-12, 40 percent of RTT SEAs in CCSS states rating this challenge perceived lack of SEA staff or expertise to provide districts with professional development or technical assistance on developing interim or formative assessments to measure student mastery of the new or revised state content standards as a major challenge to implementing new or revised state standards and aligned assessments. Ten RTT SEAs in CCSS states rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable, SEAs that did not respond to the question, and SEAs that did not adopt the CCSS in both reading/English language arts and mathematics.

Note: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN). Other states include only the 34 non-RTT states that adopted the CCSS in mathematics and reading/English language arts.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

Table 6-5. Percentage of state education agencies (SEAs) that reported major challenges using data to support reform, by RTT status: 2011-12

SEA challenge	SEAs that reported challenge as a major challenge[1]		Applicable SEAs[2]	
	RTT states	Other states	RTT states	Other states
Restrictions in rules and regulations on linking of student data to individual teachers	10% (N = 1 of 10)	41% (N = 13 of 32)	83% (N = 10 of 12)	82% (N = 32 of 39)
Current data systems make:				
Linking student test data to individual teachers difficult	33% (N = 4 of 12)	31% (N = 11 of 36)	100% (N = 12 of 12)	92% (N = 36 of 39)
Tracking the success of school improvement efforts at the student level difficult	25% (N = 3 of 12)	23% (N = 9 of 39)	100% (N = 12 of 12)	100% (N = 39 of 39)
Current data systems limit LEA and school access to new assessment data	9% (1 of 11)	22% (6 of 27)	92% (11 of 12)	69% (27 of 39)
Lack of SEA staff or expertise to provide districts with professional development or technical assistance on accessing and using assessment data	9% (N = 1 of 11)	26% (N = 8 of 31)	92% (N = 11 of 12)	79% (N = 31 of 39)

Table Reads: In 2011-12, 10 percent of RTT SEAs rating this challenge perceived restrictions in rules and regulations on linking of student data to individual teachers as a major challenge to using data to support reform. Ten RTT SEAs rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable and SEAs that did not respond to the question.

Note: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN).

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

Table 6-6. Percentage of state education agencies (SEAs) that reported major challenges when working with districts and others to develop and manage a skilled educator workforce, by RTT status: 2011-12

SEA challenge	SEAs that reported challenge as a major challenge[1]		Applicable SEAs[2]	
	RTT states	Other states	RTT states	Other states
Difficulty in measuring student growth for teachers of non-tested subjects	75% (N = 9 of 12)	76% (N = 26 of 34)	100% (N = 12 of 12)	87% (N = 34 of 39)
Concerns or opposition from educators about performance-based compensation	50% (N = 5 of 10)	79% (N = 19 of 24)	83% (N = 10 of 12)	62% (N = 24 of 39)
Concerns or opposition from educators about evaluating educators based, at least in part, on student achievement	50% (N = 6 of 12)	51% (N = 18 of 35)	100% (N = 12 of 12)	90% (N = 35 of 39)
Lack of SEA staff or expertise to provide LEAs with professional development or technical assistance on differentiated teacher compensation systems	30% (N = 3 of 10)	55% (N = 11 of 20)	83% (N = 10 of 12)	51% (N = 20 of 39)
Lack of SEA staff or expertise to develop reliable and fair methods for a statewide system of educator performance evaluation based partly on student achievement	64% (N = 7 of 11)	34% (N = 12 of 35)	92% (N = 11 of 12)	90% (N = 35 of 39)
Restrictions in rules and regulations on how educators can be compensated	33% (N = 3 of 9)	39% (N = 9 of 23)	75% (N = 9 of 12)	59% (N = 23 of 39)
Lack of SEA staff or expertise to provide LEAs with professional development or technical assistance on educator recruitment, hiring, and induction	27% (N = 3 of 11)	37% (N = 11 of 30)	92% (N = 11 of 12)	77% (N = 30 of 39)
Resistance from colleges and universities to modifying educator preparation programs to changing state reform priorities	27% (N = 3 of 11)	25% (N = 9 of 36)	92% (N = 11 of 12)	92% (N = 36 of 39)
Lack of clear federal guidance or support on educator compensation or evaluation systems	18% (N = 2 of 11)	19% (N = 6 of 31)	92% (N = 11 of 12)	79% N = (31 of 39)
Restrictions in rules and regulations on how educators can be evaluated	18% (N = 2 of 11)	13% (N = 4 of 32)	92% (N = 11 of 12)	82% (N = 32 of 39)

Table Reads: In 2011-12, 75 percent of RTT SEAs rating this challenge perceived difficulty in measuring student growth for teachers of non-tested subjects as a major challenge when working with districts and others to develop and manage a skilled educator workforce. Twelve RTT SEAs rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable and SEAs that did not respond to the question.

Note: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN).

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

Table 6-7. Percentage of state education agencies (SEAs) that reported major challenges in efforts to support improvement in low-performing schools, by RTT status: 2011-12

SEA challenge	SEAs that reported challenge as a major challenge[1]		Applicable SEAs[2]	
	RTT states	Other states	RTT states	Other states
Restrictions in rules and regulations regarding extent of autonomy that local education agencies and schools can be granted in terms of staffing or budgets	42% (N = 5 of 12)	27% (N = 10 of 37)	100% (N = 12 of 12)	95% (N = 37 of 39)
Restrictions in rules and regulations regarding teacher hiring practices	45% (N = 5 of 11)	24% (N = 8 of 34)	92% (N = 11 of 12)	87% (N = 34 of 39)
Concerns or opposition from educators about closing or restructuring schools	18% (N = 2 of 11)	31% (N = 11 of 36)	92% (N = 11 of 12)	92% (N = 36 of 39)
Restrictions in rules and regulations regarding extension of school day or year	33% (N = 4 of 12)	22% (N = 8 of 36)	100% (N = 12 of 12)	92% (N = 36 of 39)
Restrictions in rules and regulations regarding number of schools that can be closed, opened as charters, or restructured in other ways	8% (N = 1 of 12)	12% (N = 3 of 26)	100% (N = 12 of 12)	67% (N = 26 of 39)
Lack of SEA staff or expertise to provide guidance and technical assistance on whole-school reform or turnaround models to LEAs	8% (N = 1 of 12)	10% (N = 4 of 39)	100% (N = 12 of 12)	100% (N = 39 of 39)
Lack of SEA staff or expertise to provide professional development focused on improving low-performing schools	9% (N = 1 of 11)	8% (N = 3 of 39)	92% (N = 11 of 12)	100% (N = 39 of 39)
Lack of clear federal guidance or support focused on implementing whole-school reform or turnaround models	9% (N = 1 of 11)	5% (N = 2 of 38)	92% (N = 11 of 12)	97% (N = 38 of 39)
Lack of SEA staff or expertise to identify and disseminate best practices concerning improving low-performing schools	9% (N = 1 of 11)	5% (N = 2 of 39)	92% (N = 11 of 12)	100% (N = 39 of 39)
Lack of SEA staff or expertise to screen and disseminate information on EMOs, CMOs and school turnaround experts[2]	9% (N = 1 of 11)	0% (N = 0 of 21)	92% (N = 11 of 12)	54% (N = 21 of 39)

Table Reads: In 2011-12, 42 percent of RTT SEAs rating this challenge perceived restrictions in rules and regulations regarding extent of autonomy that local education agencies and schools can be granted in terms of staffing or budgets in efforts to support improvement in low-performing schools. Twelve RTT SEAs rated this challenge.

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Applicable SEAs are those that rated the challenge. This excludes SEAs that identified the challenge as not applicable and SEAs that did not respond to the question.

Note: Respondents include 50 states and DC. RTT states are the 12 states awarded RTT grants in the first two rounds of competition (DE, DC, FL, GA, HI, MA, MD, NC, NY, OH, RI, TN).

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agency Survey.

References

Behrstock, E., Clifford, M., and National Comprehensive Center for Teacher Quality. (2010*). Ensuring the Equitable Distribution of Teachers: Strategies for School, District, and State Leaders*. TQ Research and Policy Brief. National Comprehensive Center for Teacher Quality.

Chubb, J.E., and Moe, T.M. (1990). *Politics, Markets, and America's Schools*. Washington, DC: Brookings Institution Press.

Common Core State Standards Initiative, National Governors Association and Council of Chief State School Officers. (2012). *Frequently Asked Questions*. Downloaded November 22, 2013, from http://www.corestandards.org/resources/frequently-asked-questions.

Feldman, J., and Tung, R. (2001). Using Data Based Inquiry and Decision-making to Improve Instruction, *ERS Spectrum. 19*(3): 10-19.

Fuchs, L.S., Deno, S.L., and Mirkin, P.K. (1984). The Effects of Frequent Curriculum-based Measurement and Evaluation on Pedagogy, Student Achievement, and Student Awareness of Learning, *American Educational Research Journal*. 21(2): 449-460.

Garet, M.S., Ludwig, M., Yoon, K., Wayne, A. Birman, B., and Milanowski, A. (2010). *Making Professional Development More Strategic: A Conceptual Model for District Decisionmakers*. Washington, DC: American Institutes for Research.

Garrison-Mogren, R., and Gutmann, B. (2012). *State and District Receipt of Recovery Act Funds—A Report from Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role* (NCEE 2012-4057). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Available at http://ies.ed.gov/ncee.

Glazerman, S., Loeb, S., Goldhaber, D., Staiger, D., Raudenbush, S., and Whitehurst, G. (2010). Evaluating Teachers: The Important Role of Value-Added. Washington, DC: Brown Center on Education Policy. The Brookings Institution.

Goe, L., Biggers, K., and Croft, A. (2012). *Linking Teacher Evaluation to Professional Development: Focusing on Improving Teaching and Learning*. Washington, DC: National Comprehensive Center for Teacher Quality.

Goertz, M.E. (2005). State Education Policy in the New Millennium. In Carl E. Van Horn (Ed.), *The State of the States*, 4th edition. *Congressional Quarterly Inc.*, pp. 144-166.

Gonering, P., Teske, P., and Jupp, B. (2007). *Pay-for-Performance Teacher Compensation: An Inside View of Denver's ProComp Plan*. Cambridge, MA: Harvard Education Press.

Hadderman, M. (2000). *Standards: The policy environment. ERIC digest, number 138.* Eugene, OR: ERIC Clearinghouse on Educational Management.

Hamilton L., Halverson R., and What Works Clearinghouse, et al. (2009). *Using Student Achievement Data to Support Instructional Decision Making. IES Practice Guide (*NCEE 2009-4067). U.S. Department of Education, Institute of Education Sciences. Washington, DC: U.S. Government Printing Office.

Hannaway, J., and Kimball, K. (1998). *Big Isn't Always Bad: School District Size, Poverty, and Standards-based Reform.* Washington, DC: The Urban Institute.

Hardy, L. (2000). The trouble with standards. *American School Board Journal. 187*(1): 22-26.

Heneman III, H.G., Milanowski, A., and Kimball, S. (2007). *Teacher Performance Pay: Synthesis of Plans, Research, and Guidelines for Practice*. CPRE Policy Brief RB-46. Philadelphia, PA. Consortium for Policy Research in Education.

Institute of Education Sciences (2007). *National Assessment of Title I, Final Report: Volume I: Implementation. Washington, DC: U.S. Department of Education*. Available from: http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCEE20084012

Kelley, C., Heneman III, H. G., and Milanowski, A. (2002). Teacher Motivation and School-Based Performance Awards. *Educational Administration Quarterly*. 38(3): 372-401.

Levin, J., Mulhern, J., Schunck, J., and New Teacher Project. (2005). *Unintended Consequences: The Case for Reforming the Staffing Rules in Urban Teachers Union Contracts*. Brooklyn, NY: The New Teacher Project.

National Center for Education Statistics. (2011). *Mapping State Proficiency Standards onto the NAEP Scales: Variation and Change in State Standards for Reading and Mathematics, 2005-2009.* Washington, DC: U.S. Department of Education.

National Commission on Teaching and America's Future. (1996). *What Matters Most: Teaching for America's Future*. NY: Author.

Palardy, G.J., and Rumberger, R.W. (2008). Teacher Effectiveness in First Grade: The Importance of Background Qualifications, Attitudes, and Instructional Practices for Student Learning, *Educational Evaluation and Policy Analysis*. *30*(2): 111-140.

Phillips, K.J.R. (2010). What Does "Highly Qualified" Mean for Student Achievement? Evaluating the Relationships Between Teacher Quality Indicators and At-Risk Students' Mathematics and Reading Achievement Gains in First Grade. *The Elementary School Journal*. *110*(4): 464-493.

Smith, T.M., Desimone, L.M., and Ueno, K. (2005). "Highly Qualified" To Do What? The Relationship Between NCLB Teacher Quality Mandates and the Use of Reform-Oriented Instruction in Middle School Mathematics. *Educational Evaluation and Policy Analysis*. *27*(1): 75-109.

Springer, M.G., Lewis, J.L., Ehlert, M.W., Podgursky, M.J., Crader, G.D., Taylor, L.L., et al. (2010). *District Awards for Teacher Excellence (D.A.T.E.) Program: Final Evaluation Report*. Policy Evaluation Report. Nashville, TN: National Center on Performance Incentives.

Stringfield, S., Ross, S.M., and Smith, L. (1996). *Bold Plans for School Restructuring: The New American Schools Designs*. Mahway, NJ: Lawrence Erlbaum.

U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2010a). Statement of Hon. Arne Duncan, Secretary of Education, Before the Senate Committee on Health, Education, Labor, and Pensions. SH 111-911. Available from http://www.gpo.gov/fdsys/pkg/CHRG-111shrg55620/html/CHRG-111shrg55620.htm

U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2010b). *ESEA Blueprint for Reform*. Washington, DC: Author.

U.S. Department of Education, Office of Elementary and Secondary Education. (2010c). *Guidance: Funds under Title I, Part A of the Elementary and Secondary Education Act of 1965 Made Available under the American Recovery and Reinvestment Act of 2009*. Washington, DC: Author. Available from: http://www2.ed.gov/policy/gen/leg/recovery/guidance/title-i-rev-201003.doc

Webber, A., Troppe, P., Milanowski, A., Gutmann, B., Reisner, E., and Goertz, M. (2014). *State Implementation of Reforms Promoted Under the Recovery Act—A Report from Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role* (NCEE 2014-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Available at http://ies.ed.gov/ncee.

This page is intentionally blank.

Appendix A
Methodology

This page intentionally blank.

This methodology appendix summarizes the data sources for the study, describes the district and school sample designs, and presents the survey response rates. It also includes a description of weighting and nonresponse adjustments. In addition, it reviews the study team's approach to the analyses presented in this report including a discussion of indicator construction and statistical testing.

Data Sources

The analyses conducted for this report primarily used data collected during spring 2011 and spring 2012 through surveys administered to all 50 SEAs and the District of Columbia (DC) and nationally representative samples of school districts and schools. We also used extant data for three SEA indicators, and to classify districts and schools for sampling and analysis. In this section, we review the survey development process and the sources of extant data for the three SEA indicators, and the characteristics of districts and schools for the subgroup analyses

Survey Development Process

The spring 2011 surveys asked SEAs, districts, and schools about activities in the 2009-10 and 2010-11 school years. The spring 2012 surveys asked them about activities in the 2011-12 school year.

Development of the survey instruments occurred in three-stages. During the first stage, the study's survey design team drafted initial survey items based on documents describing the Recovery Act's constituent programs and research on reforms related to the four assurance areas. During the second stage, the design team vetted the draft survey instrument with individuals from the U.S. Department of Education (ED) and the study's Technical Work Group (TWG). The surveys also were pretested with a group of SEA and district officials and school principals. In the final stage, the design team incorporated feedback and refined the survey accordingly. Each stage is discussed below.

Stage one: Drafting survey items

During the first stage of survey development, the study team drafted individual survey items guided by the following goals:

- The SEA survey should collect information on state policies and programs designed to support school reform activities promoted by programs funded by the Recovery Act. The SEA survey also should capture information on the variety of roles through which states could carry out the policies and programs; specific elements of their states' evaluation, compensation, and data systems; supports to LEAs implementing reforms; and potential challenges that SEAs may face when implementing reform activities.

- The district survey should collect information on district adoption of specific education policies, use of strategies to support and promote reform policies at the school level, and potential challenges that districts may face when implementing reform strategies.

- The school survey should collect information on whether specific practices or strategies associated with implementing state or district policies or programs related to the assurances were being used in schools. The school should also capture potential challenges school leaders may have encountered when implementing specific practices.

- The surveys should not ask SEAs, districts, or schools to provide information that was already available through other surveys or reporting requirements.

With these goals in mind, the study team conducted in-depth reviews of ED documents (e.g., grant notices, regulations, and guidance) describing the aims and requirements for each Recovery Act funded program. Draft survey items included the specific strategies and activities described in SFSF assurance indicators and descriptors, the RTT selection criteria, and guidance for the Title I-ARRA and School Improvement Grant (SIG programs. [73] We also reviewed survey items included in an earlier ED-sponsored national study of Title I to identify any questions about education reform that, if included in our survey, would yield longitudinal data on a particular reform activity.

While the goal was for the state, district, and school surveys was to cover parallel topics, individual survey items were tailored to focus on activities most relevant to a particular level. For example, in the case of standards and assessments, the SEA survey asked about state adoption of the Common Core State Standards and other new or revised content standards, and on specific state activities that supported the implementation of those content standards (e.g., professional development, instructional materials, and assistance to districts in curriculum mapping). The district survey, in turn, asked about the distribution of instructional materials to schools and whether the district made available or provided professional development on the new or revised state content standards to educators. The school survey asked what practices the school used to implement new or revised state content standards such as educators' receipt of professional development, use of curriculum frameworks, or use of curriculum aligned with the new or revised state content standards.

The design team included nationally recognized experts with a thorough understanding of the latest research in the areas of educator workforce development, low-performing schools and the Title I program in particular, and public school finance. Members of the design team also contributed their experience conducting other national surveys of how states and districts were using Recovery Act education funds (e.g., state surveys conducted by the Center on Education Policy) and provided insight into the variety of roles states assume to support education reform activities.

The team contributed this deep knowledge base to the drafting of survey items. In particular, the team ensured that the SEA survey captured a range of state roles, from more prescriptive roles (such as developing and administering a statewide evaluation system) to those that involve a more supporting role (such as providing technical assistance to school districts). The team also made certain that the district survey included the range of district policies and strategies related to implementing reforms promoted by the Recovery Act. For example, a few of the act's component programs bypassed the state level to provide funds directly to districts promising to undertake specific reforms that were related to the assurances.

[73] See: U.S. Department of Education. (2010). Overview Information; Race to the Top Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. *Federal Register*, *75*(71). Available from http://www.gpo.gov/fdsys/pkg/FR-2009-11-18/pdf/E9-27427.pdf. U.S. Department of Education. (2009, November). State Fiscal Stabilization Fund Program; Final Rule. *Federal Register*, 74(217): 58436-58525. Available from http://www2.ed.gov/legislation/FedRegister/finrule/2009-4/111209a.pdf. U.S. Department of Education. (2010). School Improvement Grants; American Recovery and Reinvestment Act of 2009 (ARRA); Title I of the Elementary and Secondary Education Act of 1965, as Amended (ESEA). *Federal Register, 75*(208): 66363-66371. Available from http://www.gpo.gov/fdsys/pkg/FR-2010-10-28/pdf/2010-27313.pdf

To ensure that the survey did not duplicate other reporting requirements for the same time period, the study team reviewed closely the specific reporting requirements for recipients of each type of Recovery Act grant (e.g., SFSF, RTT).

Stage two: Vetting the draft survey instruments

In stage two, IES and members of the study's TWG reviewed the draft survey instruments, and the study team pretested the surveys with a group of SEA and district officials and school principals. An important insight gained during this stage was the importance of not wording survey items using language closely tied to language in the act and its programs (so as not to create a checklist based directly on the program requirements), in order to decrease the likelihood that response options would elicit socially desirable responses.

We pretested each survey with no more than nine respondents, focusing on (1) wording clarity, (2) information availability, (3) response burden, and (4) survey administration effectiveness. The design team conducted debriefing discussions with pretest participants to hear their comments on these four topics. We pretested the SEA survey with SEA officials in three states, which included states that did and did not win an RTT grant in the second round of that competition. The district pretest included seven districts, which included a mix of rural, suburban, and urban districts. Locations included the Northwest, Midwest, Mid-Atlantic and Southeast. The school pretest included five elementary schools, which included a mix of elementary, middle, and high schools. Locations were in the Midwest and Northeast and included schools in large urban and suburban districts. The pretest also included schools participating in SIG. Several others served high-poverty populations. In response to debriefing discussions with survey pretest participants, we revised some survey items and instructions. The pretest comments also suggested a need to streamline instructions in some places and provide definitions for key terms.

Stage three: Refine and finalize the survey instruments

In the final stage of survey development, the design team carefully considered the feedback received from all sources and reviewed each survey item to determine if particular items or instructions needed revisions. The team refined the instrument as necessary.

For the follow-up survey administration, we revised the baseline year surveys to ask about the 2011-12 school year, to remove items no longer needed (e.g., questions related to the previous school year) and to clarify or eliminate items respondents appeared to have difficulty answering. We based these changes on preliminary reviews of the baseline survey data, questions and comments from district and school respondents during data collection, and SEA remarks in response to follow-up inquiries about baseline survey responses. The revised surveys were reviewed by IES. A TWG member, who was also an SEA official, reviewed the SEA follow-up survey for clarity. We refined the instruments as necessary to incorporate their comments. IES reviewed and approved the final changes.

Extant data

In this report, three SEA indicators of reform rely on extant data sources. Two of the SEA data systems indicators use the U.S. Department of Education, State Fiscal Stabilization Fund Initial Annual State Reports (2009-10) and Amended Applications (2010-11). These are the indicators of whether the

state data system had ability to link teachers to student data and whether the state operated a longitudinal data system that included the 12 core components from the America COMPETES Act. Data for whether the state allowed for expansion of the number of charter schools come from the National Alliance for Public Charter Schools report: *Measuring up to the model: A ranking of state charter school laws* (2010 and 2011).

The study team also used extant data sources for the selected district and school characteristics examined in this report. At the district level, we examined reform implementation by district size and district poverty status. District size was based on enrollment data from the National Center for Education Statistics, Common Core of Data. Local Education Agency Universe Survey: School Year 2008–09 (ag081a.sas7bdat).[74] Large districts have at least 50,000 students. Medium districts have fewer than 50,000, but at least 15,000 students. Small districts have fewer than 15,000 students. District poverty status was based on child poverty rates from the 2008 Small Area Income and Poverty Estimates (SAIPE) data (USSD08.xls) from the U.S. Census Bureau. High poverty districts include all districts with poverty rates over 21.6 percent. Twenty-five percent of students were enrolled in schools in districts with poverty rates above this percentage.[75]

At the school level, for three of the four assurance areas, we also compared reform implementation in schools identified as low-performing with schools not so identified. School performance data came from approved state applications for SIG for school performance status.[76] Low-performing schools include schools that were (1) identified as among the lowest achieving schools; (2) have had a graduation rate below 60 percent over a number of years; or (3) other schools in improvement, corrective action, or restructuring under Title I, ESEA or identified as a tier I, II, or III school in the state's FY 2010 SIG application.

Sample Design

District Sample Design

We selected a nationally representative sample of 1,700 districts using a student enrollment driven design where districts with more students enrolled were more likely to be selected for participation. The district sample design was similar to that used in prior U.S. Department of Education studies of policy implementation.[77]

The frame for the district sample was constructed using the 2008-09 Common Core of Data (CCD) district data with updates from the preliminary data for the 2009-10 school year. The frame included only regular school districts. That is, it excluded districts that had no open, functioning schools; districts with zero enrollment; and districts exclusively for special groups of students (e.g., children in correctional facilities). The final district frame included 15,632 districts, with a total enrollment of

[74] Retrieved August 24, 2010, from http://nces.ed.gov/ccd/pubagency.asp

[75] Retrieved November 11, 2010, from http://www.census.gov/did/www/saipe/data/schools/index.html

[76] Retrieved December 2010 from http://www2.ed.gov/programs/sif/

[77] For example, for the National Longitudinal Study of NCLB (NLS-NCLB), a total of 300 districts were sampled. For NLS-NCLB and this study, the samples were drawn using a probability proportionate to size approach, with the size measure being district enrollment. (See U.S. Department of Education, 2008).

48,856,050 students. The frame covered the 50 states and the District of Columbia (no US territories), but excluded Department of Defense and Bureau of Indian Education schools.

We stratified the district frame by the district's high-poverty status[78]. Within the high-poverty stratum and its complement stratum, there were geographic strata. Districts in states that were awarded a Race to the Top (RTT) grant during the first two rounds of the grant competition were stratified by individual state so that each RTT state would be represented in the district sample. Districts in RTT finalist states and districts in other states were stratified by Census region (Central, Northeast, South, and West) to ensure balance broadly across the U.S.[79]

Districts in the high-poverty stratum were oversampled. Oversampling was needed to ensure that there were enough high-poverty districts to support subgroup analyses for this population of interest. High-poverty stratum districts are roughly one-quarter of the population of districts but with oversampling were roughly one-half of the sample. This allows for more precision (i.e., smaller standard errors) in the estimates for high-poverty districts, but oversampling reduces precision (i.e., increases the standard errors) for estimates about districts nationwide.

Oversampling was accomplished by multiplying the student enrollment for the high-poverty districts by a factor of roughly 2.75. This increased their probability of selection in the probability proportionate to size (PPS) approach described below relative to districts of the same enrollment in the complement stratum.

Districts with one school (e.g., these can be charter schools that also are a district) were undersampled to minimize the numbers of these districts in the final sample, while still representing them in the nationally representative sample. Undersampling was accomplished by multiplying the student enrollment for these districts by a factor of 0.25.

Districts were selected using a PPS sampling approach. A district's probability of selection was based on its measure of size (which is its student enrollment multiplied by over- and/or undersampling factors) relative to a sampling interval. A sampling interval for a stratum is based on the aggregated measure of size (based on the frame) divided by the expected district sample size.

---

[78] Low and Medium Poverty Stratum includes all districts with less than 21.6 percent of children in poverty according to 2008 Small Area Income and Poverty Estimates (SAIPE) data from the U.S. Census Bureau. Seventy-five percent of students were enrolled in districts with poverty rates below this poverty cut point. High Poverty Stratum includes all districts with poverty rates over 21.6 percent. Twenty-five percent of students were enrolled in districts over this poverty cut point. The high-poverty districts were oversampled (districts in highest quartile for poverty), as was also done in the NLS-NCLB study. The oversampling made the sample percentage of high poverty districts in this study slightly less than 50 percent, while in the NLS-NCLB study it was slightly larger than 50 percent. A total of 13,491 districts were found directly on the SAIPE district-level database. Non-SAIPE districts were linked by zip code or city name to their matching primary school district, and were assigned the a poverty estimate from that primary school district with the same geographic location. In a few cases, a match could not be made by zip code or city name, and these had imputations for percentage of children in poverty generated using percentage of students eligible for free or reduced lunch when that was available (the correlation between percentage of children in poverty and percentage of students eligible for free or reduced lunch was above 75 percent in districts which had both values present). There were a few final small specialized districts which could not be assigned poverty percentages by either matching or by using percentage of students eligible for free or reduced lunch (as this was missing), and were ultimately assigned to the low-poverty stratum.

[79] The RTT Winners are MA, RI, NY, MD, DC, DE, TN, OH, NC, GA, FL, HI. The RTT Finalists are NJ, PA, KY, SC, IL, CO, LA, AZ, CA. The remainder stratum consists of all other states.

Sampling intervals and districts selected with certainty (i.e., those districts with a 100 percent chance of selection) were identified in an iterative process. First, a sampling interval was computed. Next, any districts with measures of size larger than the sampling interval were set aside as certainties for the sample. Following this set-aside, we recomputed the sampling interval with the districts that were left (their aggregated measure of size divided by the sample size after subtracting off the certainty count). As this recomputed sampling interval is always smaller, this generates a new set of districts whose measures of size exceeds the new sampling interval, and these were then also designated certainties and were set aside. This methodology is standard in many nationally representative educational samples (such as the National Assessment of Educational Progress).

The process of computing sampling intervals and assigning certainties was continued in an iterative process until a recomputed sampling interval does not yield new certainties. That is, there are no districts whose measure of size exceeds the sampling interval. This sampling interval then becomes the final sampling interval because all remaining districts have enrollments less than the interval. These remaining districts are the noncertainty districts. Three hundred and seventy-eight large districts with a measure of size greater than the final sampling intervals were set aside as certainties after this iterative process.

A sample was drawn of 1,322 noncertainty districts from the frame using the final sampling intervals in each district stratum. Within each stratum, we sorted districts into an ordered list based on their one-school/charter status[80], FY2010 Teacher Incentive Fund (TIF) grant recipient status, urbancentric locale code, and enrollment; and sampled systematically using this sorted list.[81] This allows for some control of variation for these characteristics. We present in table A-1 the final sample sizes (certainties and noncertainties) for the primary district strata.

[80] District has more than one school; district has one charter school; district has one regular school.

[81] The FY2010 TIF grantee awards are found at: http://www2.ed.gov/programs/teacherincentive/apps/index.html. Urbanicity classifications are central city, urban fringe, town, and rural.

Table A-1. Final district sample sizes by district poverty stratum, state's RTT stratum, and certainty status

District poverty stratum	RTT status for the district's state	Frame enrollment (number)	Frame enrollment (percent)	Cer-tainty districts	Non-certainty frame size	Non-certainty sample size	District sample size
High	1-RTT Winner	3,389,448	6.94%	58	804	126	184
High	2-RTT Finalist	4,212,656	8.62%	105	1,002	156	261
High	3-non RTT state	4,590,248	9.40%	94	2,144	272	366
High	Total	12,192,352	24.96%	257	3,950	554	811
Low	1-RTT Winner	10,202,655	20.88%	47	1,997	165	212
Low	2-RTT Finalist	11,151,200	22.82%	33	3,217	257	290
Low	3-non RTT	15,309,843	31.34%	41	6,090	346	387
Low	Total	36,663,698	75.04%	121	11,304	768	889
Total	Total	48,856,050	100.00%	378	15,254	1,322	1,700

School Sample Design

We drew a sample of 3,800 schools within the 1,700 sampled districts, with a goal of selecting at least two schools per sampled district. The school frame was constructed using school information from the 2008-09 CCD with preliminary updates for the 2009-10 school year for sampled districts. The frame excluded schools with no enrollment, schools which had only pre-school through kindergarten grades, as well as schools that served only special needs populations (e.g., special education only schools). The school frame included 38,928 schools within the sampled districts with an enrollment of 25,456,707 students.

Schools in sampled districts with only one or two schools (N=192) were selected with certainty into the sample. As with the district sample, we used a PPS sampling approach, where sampling intervals and school certainties were identified in an iterative process. The probability of selection was proportional to the measure of size (which equals school enrollment in general, with an extra oversampling factor for persistently lowest-achieving (PLA) schools[82]) divided by the district probability of selection.[83] PLA schools were oversampled to achieve an expected sample size of 570. This allows for

[82] Persistently lowest-achieving schools means, as determined by the State: (a) Any Title I school in improvement, corrective action, or restructuring that —(i) Is among the lowest-achieving five percent of Title I schools in improvement, corrective action, or restructuring or the lowest-achieving five Title I schools in improvement, corrective action, or restructuring in the State, whichever number of schools is greater; or (ii) Is a high school that has had a graduation rate that is less than 60 percent over a number of years; and (b) Any secondary school that is eligible for, but does not receive, Title I funds that —(i) Is among the lowest-achieving five percent of secondary schools or the lowest achieving five secondary schools in the State that are eligible for, but do not receive, Title I funds, whichever number of schools is greater; or (ii) Is a high school that has had a graduation rate that is less than 60 percent over a number of years. (U.S. Department of Education, November 2010, Guidance on FY2010 School Improvement Grants, p. 1. downloaded from: http://www2.ed.gov/programs/sif/sigguidance11012010.pdf). School PLA designations are from approved state applications for School Improvement grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/

[83] This is generally done in nested multistage probability sampling, where units at one level (schools) are drawn within the sampled units from a higher level (districts). Once the district is sampled, all of its nested schools receive boosts in their

more precision (smaller standard errors) in the estimates for these schools. Oversampling was accomplished by multiplying the school enrollment for PLA schools by a factor of 8.

In processing the school frame using the school's adjusted measure of size (adjusted by dividing by the district probability of selection), an additional 230 schools were identified as certainties. These were schools with adjusted probabilities of selection (after division by the district probability selection) greater than 1.

The remaining 3,378 schools to sample from a frame of 38,506 schools were selected using a statistical method called "balanced sampling," which controlled the number of schools sampled for each sampled district[84] and balanced across two other stratification levels (or dimensions, described below).

The school frame of 38,506 schools was divided into eight major strata[85] based on high poverty/low poverty status of the district, certainty or noncertainty status of the district, and whether or not the district had at least one persistently lowest-achieving (PLA) school. Across the entire national school sample, we balanced on the following two dimensions nested within eight primary district strata:

- Dimension 1: school level/span (elementary, high, middle and other)[86] by school performance status (PLA; not PLA, but the school is in need of improvement (SINI)[87] ; or other).
- Dimension 2: school level/span by school size (large/small) for elementary and high schools. Middle and other was not separated out by school size.[88]

All 38,506 schools had assigned probabilities of selection strictly less than 1. Their probabilities were raked[89] to add to the desired district sample sizes for each raking dimension cell. One raking dimension

---

measure of size (through dividing by the district probability of selection) to make sure the school sample is appropriately large enough within the sampled district. For example, if the district probability of selection is 20 percent and the district is sampled, then the schools in that district have their measures of size multiplied by 5. In a sense, the sampled schools in that district are representing all schools in that district, ***and also*** the schools in four other districts which were not sampled (the district was sampled at a rate of 1 in 5). Hence we want a five-times bigger school sample in that district.

[84] Schools in districts with only one or two schools were selected with certainty. The school sample size for remaining districts was proportional to the relative aggregated measure of size for the district, as is standard in multistage probability sampling. 1,509 districts had a school sample size of 2. Eighty-four larger districts had a school sample size of 3 or larger because of their larger aggregate measures of size. The largest school sample size for a district was 77 schools.

[85] The high poverty/low poverty district strata and the PLA inclusion strata were added as major strata as these were contained units designated for oversampling, and the stratification helped to control this. The certainty/noncertainty district strata were added as major strata to facilitate variance estimation. Variance estimation is based on the highest stage of sampling, which is at the district level for noncertainty districts and at the school level for certainty districts (for certainty districts there is no actual sampling at the district level).

[86] Elementary is defined to have a low grade below fourth grade, and a high grade no higher than eighth grade. Middle is defined to have a low grade of fourth through seventh, and a high grade no higher than ninth grade. High is defined to have a low grade no lower than seventh, and a high grade of twelfth. Other schools are all other schools.

[87] Under the No Child Left Behind Act of 2001, schools that have not met state established student achievement goals for two or more years are identified as schools in need of improvement (SINI). The schools designated as "not PLA, but SINI" used for sampling are the Tier III schools identified in the approved state applications for School Improvement grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

[88] For elementary/high schools, "large" is defined to be larger than the median enrollment for all elementary/high schools in the US. For middle and other schools, there was no separation into large and small in the stratification.

is the district, one is school span/school size, and one is school span/school performance status. For example, for the district dimension, most desired district sample sizes were 2 or 3 schools.

School sampling was performed separately for each of the eight major strata. The object of this balanced sampling was to select the schools respecting the final measures of size within each major district stratum while simultaneously respecting three sets of stratification sample sizes (i.e., it matches (or respects) the multiple constraints as closely as possible). We present in table A-2 the school frame and school sample sizes by the major district strata.

Table A-2. School frame and sample sizes for the major district strata

District poverty stratum	District certainty stratum	District PLA status[1]	School frame count (excludes initial certainties)[2]	School sample size targets[3]	School certainties identified by PPS approach	School frame count (excludes all certainties)	School sample size (excludes all certainties)[4]
High	Noncrt	noPLA	2,700	796	15	2,685	781
High	Noncrt	w/PLA	819	191	77	742	114
High	Cert	noPLA	2,782	269	0	2,782	269
High	Cert	w/PLA	9,713	621	93	9,620	528
Low	Noncrt	noPLA	8,825	1,270	10	8,815	1,260
Low	Noncrt	w/PLA	2,557	179	35	2,522	144
Low	Cert	noPLA	4,518	130	0	4,518	130
Low	Cert	w/PLA	6,822	152	0	6,822	152
All	All	All	38,736	3,608	230	38,506	3,378

[1] No PLA indicates that the district did not have any PLA schools. W/PLA indicates that the district had at least one PLA school.
[2] The school frame count excludes the 192 schools identified as initial certainty schools because they are in a district with only one or two schools.
[3] The school sample size is the targeted school sample size by district strata with the initial set of 192 certainty schools removed.
[4] These 3,378 schools were selected through the balanced sampling procedure.

The desire to balance simultaneously on three stratification structures required the study team to use special methods, based on the work of Deville and Tillé (2004). We found, however, that the software available for doing this was inadequate; it did not allow us to balance completely at the district level, guaranteeing at least two sampled schools per district (which was a study requirement) because of the large sample sizes. We developed an algorithm for executing balanced sampling using Westat's sampling and calibration software.[90]

At the conclusion of the balanced sampling process, the assigned school sample sizes for districts were matched exactly, and assigned school sample sizes for the grade span-performance strata

[89] Raking is also called iterative proportional fitting (IPF). IPF adjusts probabilities (or weights, etc.) to aggregate to certain desired cell totals, while being as close as possible to the original values. (The cells are generally marginal cells for a multiway table.)

[90] We deviated from the Deville and Tillé approach as is implemented in the software macro **samplecube** from https://cran.r-project.org/web/packages/sampling/sampling.pdf, as we found that the level of achieved balance was not adequate for the evaluation's purposes. The approach we used in place utilizes Westat production software macros WESSAMP and FSRAKE in a sequential process. The former macro draws stratified probability proportionate to size systematic samples, and the latter macro carries out iterative proportional fitting (raking).

(elementary, middle, high, other crossed with PLA, Other SINI, Non SINI) and span-size strata (elementary: large and small, middle and other, high: large and small) matched not exactly, but with very small deviations from balance.[91] In the final drawn sample, 543 PLA schools were sampled.

Response Rates and Weighting

Administration for the spring 2011 surveys started in April and continued through July for the SEA survey. The majority of responding districts and school submitted their surveys by the end of August 2011, but data collection was kept open into November to accommodate the schedules of respondents for particular districts and schools. The study team reminded participants completing the survey after the 2010-11 school year that they should think back to the previous year when answering the survey. Administration for the spring 2012 surveys started in May 2012 and continued into August 2012 for the SEA survey. The majority of responding districts and schools submitted their surveys by the end of August 2012. However, data collection was kept open into October 2012 to accommodate respondents in a few districts and schools. These respondents were reminded that they should think back to the 2011-12 school year when completing the surveys.

All SEAs responded to both surveys. For the 2011 data collection, 88 percent of districts (unweighted) and 78 percent of schools responded to the web surveys. The response rates increased to 91 percent for districts, but decreased to 72 percent for schools in the 2012 data collection.

The state-level survey data requires no weights, as every state was canvassed in this study. District and school survey data were weighted to generate the cross-sectional estimates found in this report. We generated final cross-sectional weights for each survey year: 2009-10, 2010-11, and 2011-12. However, given that the data for the 2009-10 and 2010-11 school years came from the same respondents to the 2011 survey administration, each respondent's final weight is the same for those school years.

Although the district and school sample designs used a probability proportionate to size (PPS) approach (where larger districts and schools had a higher probability of selection than they would have had otherwise), the district and school percentages in this report were generated using "unit-based" weights. The unit-based weights are appropriate when generating estimates to answer the research questions for this report which ask about the percentages of districts and schools implementing reforms and reporting major challenges. However, these weights do have higher variability than "enrollment-based" weights (i.e., where the base weight is equal to the district's/school's enrollment multiplied by the inverse of the district's/school's probability of selection.) [92] The enrollment based weight starts with the base weight E/pi, where E is the school enrollment, and pi is the school probability of selection. The unit-based weight starts with 1/pi. Pi is proportional itself to a function of enrollment, which varies

[91] The differences between the final realized sample size and the target sample size for the span-performance strata and the span-size strata were small (by only one or two schools, with a few cases of up to five schools [INSERT)], but the difference was not systematic in any particular direction.

[92] The study team also generated a set of "enrollment-based" weights. The enrollment-based weights can be used to make unbiased estimates of total enrollment in districts or schools nationwide. The team also generated a set of unit-based and enrollment-based longitudinal weights, which can be used with the subset of districts and schools that responded to both the 2011 and 2012 surveys. The enrollment-based and longitudinal weights were not used for the analyses in this report but are available to users through the restricted-use data file available through the IES Data Security Office to licensed users.

considerably across districts (and somewhat less across schools), so the unit-base weight varies considerably. But E/pi does not vary much, as pi is close to proportional to E.). All other things being equal, a higher variability in the weights leads to higher standard errors. (See for example, Valliant, Dever, Kreuter, 2013, Section 14.4.) However, at the school level, school enrollment sizes are less variable than the district enrollment sizes, so the design effects from having unit-based estimates with a PPS sample are smaller for schools than for districts.[93]

The following describes the process of developing the final unit-based sampling and replicate weights for the district and school data from the 2011 and 2012 surveys.

District Weights

Base weights

We first generated base sampling weights. The base sampling weight for the unit-based district weight is equal to the inverse of the district probability of selection. The unit-based weights when aggregated generate unbiased estimates of total districts[94] (this is the well-known 'Horvitz-Thompson estimator': see for example Valliant et al., 2013, Section 13.3)

Replicate weights

While we can use final sampling weights alone to obtain approximately unbiased percentage estimates, we needed to apply appropriate variance estimation techniques to produce approximately unbiased estimates of the standard errors (Brick, Morganstein, and Valliant, 2000, p. 2). As a result, we relied on replication methods[95] and generated cross-sectional district replicate weights for each survey year. For districts selected with certainty into the sample, the replicate weights are equal to the base sampling weights. For the noncertainty districts, the replicate weights were generated using the JK2 jackknife replication method (the JK2 method is discussed in for example Valliant et al.,2013, p. 420), with the variance strata being based on the ordering of districts on the district frame, nested within the primary district strata. Appropriate finite population corrections were incorporated into the replicate weights (see for example Rizzo and Rust, 2011).

Nonresponse and benchmarking adjustments

We incorporated nonresponse adjustments to the sampling and replicate weights since the district response rate was not 100 percent. The adjustments for the cross-sectional weights for the 2012 survey data was done in a similar way as for the 2011 survey data, except that the nonresponse indicators were updated to indicate a differing set of respondents (if some schools responded for one year, but not the other). We applied the same approach for nonresponse and benchmarking adjustments to the base sampling and replicate weights from both survey administrations. The adjustments were done according to a raking process, in which district base and replicate weights for

[93] Note that the previous NLS-NCLB study also generated both enrollment-based and unit-based weights.

[94] This is true for any district subgroup.

[95] As noted in Brick et al. (2000), replication involves repeatedly selecting subsamples from the full sample. The desired statistics are computed from each subsample, and the variability among these subsamples or replicate estimates is used to compute the standard error of the full sample estimate (pp. 2-3).

responding districts were calibrated to make sure the totals match unit totals for a variety of district characteristics[96]. The raking adjustments simultaneously adjust for nonresponse and improve precision. Note that this adjustment approach was similar to that used in other U.S. Department of Education studies of district policy implementation.[97]

Raking adjustments were nested within the four cells defined by district certainty status and high/low poverty status. Within these four cells the raking dimensions are RTT Winner, RTT Finalist, non RTT state crossed with Census region (a total of 12 cells); and Urbanicity (1—Central City; 2—Urban Fringe; 3—Town; 4—Rural) (a total of 4 cells). The control totals for the unit-based weights are district totals for each of these cells using the final district frame. These adjustments make sure the weighted percentages at the sample level were exactly equal to the exact percentages at the frame level for these important district subgroups. This completely re-balances the responding district sample to the frame for these cells (and also eliminates any bias that would arise from an imbalance due to higher or lower mean response for these cells). The raking approach is based on the presupposition that response propensity (the underlying propensity to respond for any sample unit) fits a main-effects model with predictor variables being the cells from the two raking dimensions. We checked for deviations from this main-effects model (i.e., significant interaction terms) using logistic regression and a data mining tool. We did not find these interactions: the main-effects model was found to fit well.

School weights

Base weights

For the schools, the base sampling weight for the unit-based weight is equal to the inverse of the school's probability of selection, which includes the school's district's probability and the conditional school probability given the school's district was selected. As with the district base weight, the unit-based base weights when aggregated generate unbiased estimates of total schools[98].

Replicate weights

Within the noncertainty districts, district selection is the first stage of selection. Schools are the second stage of selection. For variance estimation purposes, the key level to capture is always the first stage of selection. In this case, it is district selection: the replicate weights should primarily reflect non-certainty district sampling. The variance from district sampling is correctly measured by the district replicate weights, which are then multiplied by the conditional school selection factor (the inverse of the conditional school probability of selection) to get to the school level. But the finite population

[96] Doing this will improve the precision for any characteristics which are correlated to the characteristics defining the raking cells.

[97] For the NLS-NCLB and this study, nonresponse adjustments and calibration (raking) adjustments were made to the weights. The district-level response rate for NLS-NCLB was 96 percent in 2004-05 and 99 percent in 2006-07. The district-level response rates for this study were 88 percent for 2011 and 91 percent for 2012. Calibration in NLS-NCLB was for district size (four cells), district poverty status (high and other), Census region, and metropolitan status (two cells). Calibration for this study was for district poverty status (high and other), RTT status (RTT Winner, RTT Finalist, Other), Census Region, and urbanicity (four cells). Calibration adjusts the weights to better correspond to the proportions of the population in each of these categories. NLS-NCLB did a limited amount of trimming of extreme weights that was not done in this study (trading off in NLS-NCLB a small amount of potential bias for a slight reduction in variance).

[98] This is true for any school subgroup.

corrections[99] at the school level are not properly reflected by these adjusted district replicate weights, so we need an extra set of school-specific replicate weights to reflect properly the school finite population correction (which is not equal to the district finite population correction). This methodology of creating school-level replicate weights also was used in recent (2011 and after) National Assessment of Educational Progress studies (as described in Rizzo and Rust, 2011).

Within the certainty districts, school selection is the first stage of selection. The schools were sampled using the district as strata, but also utilizing a balanced sample design in order to balance to span-performance and span-size strata as well. As a result, the replicate weights for schools in these districts are based on the Fay's Method replication approach.[100]

Nonresponse and benchmarking adjustments

Given that the school response rates for both administrations were less than 100 percent, we implemented nonresponse adjustments to the base sampling and replicate weights. The adjustments for the cross-sectional weights for the 2012 survey data was done in a similar way as for the 2011 survey data, except that the nonresponse indicators were updated to indicate a differing set of respondents (if some schools responded for one year, but not the other).

These adjustments for the 2011 data were according to a raking process, which raked the school base weights (and school replicate base weights) for the responding schools to control totals for cells in several dimensions. The original school frame (before subsetting to the sampled districts) was utilized to provide these school count control totals within each.

There were three raking dimensions. The first two dimensions were determined by school stratification (defined below), and the third dimension was determined by the results of a weighted logistic regression analysis. For the weighted logistic regression analyses, the dependent variable was school response/nonresponse. The weight was the unit-based school base weight (the inverse of the school's overall probability of selection). The predictor variables included the school's Race to the Top Stratum (RTT award state, RTT Finalist state, all other states), Census Region or Census Division, poverty status (two cells: high poverty and low/medium poverty, or three cells: high poverty, medium poverty, low poverty), and urbanicity with or without crossing with city size (four cells or six cells respectively). The weighted logistic regression analyses were used to identify a third dimension of response adjustment cells. This analysis resulted in the selection of raking dimensions for the raking nonresponse adjustments.

[99] The finite population correction is the reduction in variance that results from a nonnegligible sampling fraction. For example, if the sampling fraction is 20 percent, the finite population correction is 80 percent. This reduction in variance reflects that 20 percent of the population is actually known. See for example Cochran (1977), Section 2.6.

[100] Deville and Tillé 2005 provide approximate estimators for the balanced sampling design. Kim and Wu (2011) recommend Fay's Method for estimating Deville and Tillé's approximate variance.

The raking procedures were done separately for the four cells based on district certainty status and poverty status (high poverty vs. low/medium poverty). The three dimensions for unit-based weights within the four primary cells are as follows[101]:

(1) School performance strata (PLA[102], nonPLA SINI[103], and nonSINI) nested within school span strata (elementary, middle, high, combined);
(2) School size strata (small, medium, large) nested with school span strata;
(3) RTT stratum crossed with Census region crossed with urbanicity (four cells).

The raking procedure brings the nonresponse-adjusted weights for the responding school set within each raking cell back to the Common Core of Data (CCD) frame totals for the cells[104], completely re-balancing the responding school sample to the frame for these cells (and eliminating any bias that would arise from an imbalance due to higher or lower mean response for these cells). This was done successfully, at least along these dimensions[105], the effects of school nonresponse was fully adjusted for the weights for the 2011 survey data.

Generalizability of District and School Estimates

The estimates from the district and school samples in this report generalize to 2009-10, 2010-11, and 2011-12 activity for districts and schools in operation during the 2010-11 school year. That is, the weighted cross-sectional 2009-10 estimates represent what 2010-11 districts were doing in 2009-10. The weighted cross-sectional 2011-12 estimates represent what 2010-11 districts were doing in 2011-12 (among those that were still operating in 2011-12).

The samples cannot be used to generalize to the 2009-10 population of school districts because we classified as ineligible for the study those districts and schools that were operating in 2009-10, but not operating in 2010-11. The samples cannot be used to generalize to the 2011-12 population of school districts and schools because we did not refresh the samples to try to incorporate those districts and their schools that started operating in 2011-12.

Analysis

This section begins with an overview of the indicator approach to measure reform implementation, and then provides more details about the construction of the indicators. The details include the treatment of state activities that may continue beyond one year and the treatment of item-level missing data in the construction of the district and school indicators. See appendix B for information specific to each indicator, including its component items and rules for using component

[101] Some collapsing of these cells was done if the cell sizes were too small (less than 10) or the cell adjustments too extreme.

[102] Persistently Lowest-Achieving school.

[103] School in Need of Improvement.

[104] It should be noted that we did find some differences in response rates across these cells.

[105] Nonresponse bias will also be reduced for any characteristics correlated in the population to these cell categories, with the degree of reduction roughly proportional to the degree of correlation with these cell categories.

items to create the indicator (e.g., whether an indicator is met if district responds 'yes' to at least one of the items or all of the items).

Overview of Indicator Approach

To address the study questions, we developed indicators of reform implementation at the state, district, and school levels. The indicators reflect ED's priorities and key reform strategies within each of the four assurance areas. The indicators were designed to provide a high-level snapshot of whether SEAs, districts, or schools had a particular policy in place, provided support, or carried out a particular activity. The indicators do not describe the quality or intensity of reform implementation. For most indicators, an SEA, district, or school was said to have met an indicator if it reported implementing any one of a particular set of related strategies. For a smaller set of indicators, an SEA or district met the indicator only if it met more than one requirement.

Because of the variety of potential SEA and district responses to Recovery Act reform requirements and because assurances could be met by using different approaches, the indicators often captured several ways in which a state, district, or school might implement a reform. For example, SEAs could use multiple strategies in their role to improve standards and assessment, from providing professional development directly to supporting LEA professional development through guidance and technical assistance. Similarly, districts could use multiple strategies to support or promote the implementation of new standards and assessments in schools, from distributing instructional materials to providing criteria for schools to use when selecting new aligned curriculum. Where appropriate, the indicators include multiple strategies, but do not assume that one approach is preferable to another. Some Recovery Act programs, however, have more prescriptive requirements. In these cases, states and districts had to take specified actions, such as adoption of the CCSS or the inclusion of student growth measures in educator evaluation systems, to meet an indicator.

Calculating SEA Indicators

All but three of the 18 SEA indicators of reform are based on the 2011 and 2012 SEA surveys. In these surveys, SEAs were asked to check a box (see exhibit A-1)if they had a particular role in reform implementation (e.g., simplifying or shortening the process of obtaining full licensure); if their states' evaluation, compensation, or data system included specific elements (e.g., their teacher evaluation system used rating scales or rubrics that define three or more levels to evaluate classroom instruction or practice); or if they provided supports to LEAs implementing reform (e.g., funding, technical assistance, training). In the analysis of these data, an SEA was classified as having implemented a reform if they checked the relevant box. The responses to related survey items were combined following indicator-specific decision rules to determine whether the SEA met the indicator. For example, to meet the requirements of the indicator *SEA Facilitated Educators' Access to Assessment Data,* an SEA had to either (1) check the box indicating they facilitated access to new or existing assessment data by providing educators with key LEA, school and student indicators through report cards, data dashboards, or other feedback and analysis systems or (2) check the box indicating they facilitated access to new or existing assessment data by establishing and maintaining state data systems that share longitudinal data on students with local data systems. See appendix B for the requirements for all indicators.

Exhibit A-1. Example of SEA survey response format

Components **Included in Statewide System or Standards, Guidelines and/or Technical Assistance** for Teacher Evaluation Systems	Included in 2009-2010 *(Check all that apply.)*	Included in 2010-2011 *(Check all that apply.)*
A rating scale or rubric that defines three or more performance levels to evaluate classroom instruction or practice	☐	☐

In developing the SEA indicators, the study team recognized that some reform activities have the potential to continue over multiple years once they are instituted. For example, when a state issues standards or guidelines for teacher preparation programs, these are likely to remain in place until new or revised standards or guidelines are issued. So, an action in one year can be viewed as ongoing or providing continued support for a reform effort in subsequent years. In measuring SEA reform activity for selected indicators, if a state reported activity in a previous year (i.e., 2009-10 or 2010-11), the analyses counted the SEA as meeting the indicator in subsequent years. In general, we treated the following types of SEA activities as actions that can represent ongoing or continued support in future years:

- Provided state-developed professional development to LEAs,
- Supported LEA-designed professional development by providing funding, guidance and technical assistance, or "train the trainers" sessions,
- Identified, developed, and/or distributed instructional materials to LEAs,
- Simplified or shortened process of obtaining teacher licensure/certification,
- Authorized independent providers to provide teacher training,
- Issued standards or guidelines, and
- Passed legislation to increase the permissible number of charter schools or removed prohibitions on charter schools.

Twelve of the 18 state indicators included activities treated in indicator construction as ongoing beyond the initial year that activity was reported. In table A-3, we present each SEA indicator, identify those that consider activity in prior years as ongoing into the current year, and include the number of SEAs meeting an indicator in a given year based solely on the survey responses for that year and the number meeting that indicator based on on-going type activities reported for a prior year.

Table A-3. SEA indicators' consideration of ongoing activity and the number of SEAs meeting each indicator through the current year's requirements or through previous years' activities, by assurance area and school year

Indicator by assurance area	Indicator considers activity from previous year	2009-10	2010-11	2011-12
Standards and assessments				
State had adopted the Common Core State Standards in mathematics and reading/English language arts	No	Not applicable	In current year [43] (2010-11)	In current year [46] (2011-12)
SEA provided, guided or funded professional development on the Common Core State Standards	Yes		In current year [37] (2010-11)	In current year [44] or prior year [1] (2011-12 or 2010-11)
SEA provided instructional materials or curriculum assistance for the Common Core State Standards	Yes		In current year [29] (2010-11)	In current year [39] or prior year [3] (2011-12 or 2010-11)
State was a member of a federally funded consortium developing assessments aligned to the Common Core State Standards	No		In current year [43] (2010-11)	In current year [44] (2011-12)

continued

Table A-3. SEA indicators' consideration of ongoing activity and the number of SEAs meeting each indicator through the current year's requirements or through previous years' activities, by assurance area and school year (cont'd)

Indicator by assurance area	Indicator considers activity from previous year	2009-10	2010-11	2011-12
Data systems				
State operated a longitudinal data system that included 12 core components	No	In current year [13] (2009-10)	In current year [13] (2010-11)	Not available
State data system had ability to link teachers to student data	No	In current year [30] (2009-10)	In current year [30] (2010-11)	
SEA facilitated educators' access to assessment data	No	In current year [35] (2009-10)	In current year [43] (2010-11)	In current year [45] (2011-12)
SEA provided professional development or technical assistance to support educators' use of assessment data	Yes	In current year [32] (2009-10)	In current year [40] or prior year [0] (2010-11 or 2009-10)	In current year [43] or either of two prior years [4] (2011-12 or 2010-11 or 2009-10)

continued

Table A-3. SEA indicators' consideration of ongoing activity and the number of SEAs meeting each indicator through the current year's requirements or through previous years' activities, by assurance area and school year (cont'd)

Indicator by assurance area	Indicator considers activity from previous year	2009-10	2010-11	2011-12
Educator workforce development				
SEA simplified or shortened educator licensure process or authorized non-university preparation programs	Yes	In current year [33] (2009-10)	In current year [35] or prior year [0] (2010-11 or 2009-10)	In current year [33] or either of two prior years [6] (2011-12 or 2010-11 or 2009-10)
SEA issued standards or guidelines for teacher preparation programs	Yes	In current year [28] (2009-10)	In current year [32] or prior year [0] (2010-11 or 2009-10)	In current year [26] or either of two prior years [12] (2011-12 or 2010-11 or 2009-10)
SEA issued standards or guidelines for principal preparation programs	Yes	In current year [20] (2009-10)	In current year [25] or prior year [1] (2010-11 or 2009-10)	In current year [24] or either of two prior years [11] (2011-12 or 2010-11 or 2009-10)
SEA supported use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation	Yes	In current year [1] (2009-10)	In current year [2] or, if sub-set of conditions were met, prior year [0] (2010-11 or conditionally 2009-10)[1]	In current year [14] or, if sub-set of conditions were met, prior years [0](2011-12 or conditionally 2010-11 or 2009-10)
SEA supported use of student achievement gains for principal evaluation	Yes	In current year [6] (2009-10)	In current year [9] or, if sub-set of conditions were met, prior year [0] (2010-11 or conditionally 2009-10)	In current year [21] or, if sub-set of conditions were met, prior years [1] (2011-12 or conditionally 2010-11 or 2009-10)

continued

Table A-3. SEA indicators' consideration of ongoing activity and the number of SEAs meeting each indicator through the current year's requirements or through previous years' activities, by assurance area and school year (cont'd)

Indicator by assurance area	Indicator considers activity from previous year	2009-10	2010-11	2011-12
SEA supported differentiating teacher compensation based on student achievement gains	Yes	In current year [7] (2009-10)	In current year [9] or, if sub-set of conditions were met, prior year [0] (2010-11 or conditionally 2009-10)	In current year [13] or, if sub-set of conditions were met, prior years [2] (2011-12 or conditionally 2010-11 or 2009-10)
Support for improving low-performing schools				
State allowed for expansion of the number of charter schools	Yes	In current year [19] (2009-10)	In current year [25] or, if sub-set of conditions were met, prior year [3](2010-11 or conditionally 2009-10)[1]	In current year [25] or, if sub-set of conditions were met, prior years [8] (2011-12 or conditionally 2010-11 or 2009-10)[1]
SEA provided guidance on choosing and implementing school intervention models defined by ED	Yes	In current year [42] (2009-10)	In current year [50] or prior year [0] (2010-11 or 2009-10)	In current year [50] or either of two prior years [1] (2011-12 or 2010-11 or 2009-10)

continued

Table A-3. SEA indicators' consideration of ongoing activity and the number of SEAs meeting each indicator through the current year's requirements or through previous years' activities, by assurance area and school year (cont'd)

Indicator by assurance area	Indicator considers activity from previous year	2009-10	2010-11	2011-12
SEA monitored deployment of effective educators in low-performing schools	No	In current year [7] (2009-10)	In current year [9] (2010-11)	In current year [12] (2011-12)
SEA supported using compensation incentives to improve staffing at low-performing schools	Yes	In current year [8] (2009-10)	In current year [9] or, if sub-set of conditions were met, prior year [0] (2010-11 or conditionally 2009-10)	In current year [12] or, if sub-set of conditions were met, prior years [2] (2011-12 or conditionally 2010-11 or 2009-10)

[1] For this indicator, to meet the indicator a state had to either: a) have no cap in the current year on the number of charter schools, or b) had to pass legislation in the current year or one of the prior years covered by the study to either increase the permissible number of charter schools or remove prohibitions on charter schools.

This page is intentionally blank.

Calculating District and School Indicators

At the district level, we created 21 indicators of reform implementation from survey data. When reporting on activities for the 2010-11 and 2011-12 school years, districts were asked whether they used or included the strategy in all schools (or for all educators), some schools (or for some educators), or if they were not using the strategy, whether or not they were actively planning its use or (see exhibit 2). For those school years, the district was counted as using the reform strategy if they reported that they used or included the strategy in all or some schools. For the 2009-10 school year, the response options included only Yes and No. For that school year, districts that responded Yes were counted as using the strategy.

Exhibit A-2. Example of district survey response formats

Components of Educator Performance Evaluation System in Your District	Component in the System in 2009-2010 (Check Yes or No)	Status in 2010-2011 for Educators (Check one in each row)				
		No Current Plans to Include the Component	Actively Planning Use or Developing the Component	The Component was Used in the Evaluation of...		
				Half of Educators or Fewer	More Than Half of Educators but Not All Educators	All Educators
Teacher evaluation system						
Uses a rating scale or rubric that defines three or more performance levels to evaluate classroom instruction or practice	☐ Yes ☐ No	☐	☐	☐	☐	☐

At the school level, we created 22 indicators of reform implementation from survey data. For each school year, the school survey asked principals to answer Yes or No about use of particular reform activities or practices (see exhibit 3).

Exhibit A-3. Example of school survey response formats

Performance Evaluation Practices	Used in 2009-2010 (Check Yes or No)	Used in 2010-2011 (Check Yes or No)
Teacher evaluation practices		
Uses a rating scale or rubric that defines three or more performance levels to evaluate classroom instruction or practice	☐ Yes ☐ No	☐ Yes ☐ No

As with the SEA indicators, for the district and school indicators components were combined following the indicator's decision rules to determine whether the district or school met an indicator. For

example, to meet the district indicator *District Provided Compensation Incentives to Improve Staffing at Low-Performing Schools*, a district with low-performing schools had to count either as (1) providing higher starting salaries, add-ons, stipends, or signing bonuses for teachers who move to teach in low-performing schools or (2) providing loan forgiveness or tuition support for teachers who move to low-performing schools. See appendix B for the requirements for all indicators.

When calculating the percentage of districts or schools that met an indicator, item-level missing data sometimes prevented us from assigning an indicator value to a specific district or school. The denominators for the percentage of districts or schools that met an indicator (e.g., supported educators' access to assessment data) includes only the number of districts or schools that provided sufficient data to determine whether or not they fulfilled the requirements of the indicator.[106] When constructing district indicators, between 0.1 and 9 percent of responding districts did not supply sufficient data to determine whether district activities met the criteria for the indicator and were therefore excluded from the analysis (see table A-4). For school-level indicators, between 2 and 13 percent of responding schools did not supply sufficient data to determine whether they met the criteria for the indicator and were excluded from the analysis (see table A-5).

Table A-4. Percentage of districts excluded from indicators, by assurance area and year

Assurance area	2009-10	2010-11	2011-12
Standards and assessments	Not applicable	4 – 9 %	0.1 – 0.6%
Data systems	7%	8 – 12%	0.4 – 0.7%
Educator workforce development	0.2 – 4%	4 – 5%	0.2 %
Support for low-performing schools	Not applicable	Not applicable	0.4 – 0.6%

Table A-5. Percentage of schools excluded from indicators, by assurance area and year

Assurance area	2009-10	2010-11	2011-12
Standards and assessments	Not applicable	6 – 9%	3 – 7%
Data systems	8%	7 – 8%	4 – 6%
Educator workforce development	5 – 6%	4 – 5%	2 – 3%
Support for low-performing schools	5 – 6%	3 – 6%	6 – 13%

Statistical Tests Used

In this section, we describe the methodology for tests used for this report that test for significant differences in the percentages of districts (or schools) meeting indicators or reporting major challenges. Statistical testing was not required to examine the SEA data because those data are universe data from SEAs in all 50 states and the District of Columbia.

[106] For example, if to meet an indicator a district had to use at least one of four possible strategies for providing teachers with access to assessment data, then a district provided sufficient data if it either a) responded that it implemented one of the strategies, or b) responded that they did not implement any of the four strategies. If the district failed to provide an answer to one of the strategies and did not implement any of the remaining three, then that district did not provide sufficient data to determine whether or not it fulfilled the requirements of the indicator. That is, we were unable to determine if the district met the indicator based on the responses available.

The report includes findings for four types of comparisons:

- **Comparisons of the percentage of districts (or schools) meeting a particular reform indicator over time.** For example, is the percentage of districts that provided educators with access to assessment data in 2011-12 significantly different from the percentage that did so in 2010-11?

- **Subgroup-to-subgroup comparisons of the percentage of districts (or schools) meeting a particular reform indicator in 2011-12.** For example, is the percentage of low-performing schools where a principal was evaluated based in part on student achievement gains in 2011-12 significantly different from the percentage of other schools with this practice?

- **Indicator-to-indicator comparisons for 2011-12**. For example, was the percentage of districts that provided educators with access to assessment data in 2011-12 significantly different from the percentage of districts that used longitudinal data to track student achievement gains for individual teachers in 2011-12?

- **Challenge-to-challenge comparisons for 2011-12.** For example, was the percentage of districts that reported current assessments are not aligned with the new standards as a major challenge significantly different from the percentage of districts that reported concerns or oppositions from school staff about additional assessments?

Each comparison in this report uses the district and school respondents for a given survey administration (spring 2011 or 2012) with sufficient data on each reform indicator. [107] The analyses in this report are not limited to the districts and schools that responded to both surveys (i.e., the analyses do not use the longitudinal sample).

We conducted three types of statistical tests for the comparisons described above. These tests were run using the final unit-based, cross-sectional replicate weights. These replicate weights take into account the complex sample design and nonresponse adjustments. They are valid for computing the correct cross-sectional standard errors for that year (taking into account the particular sample composition for that year), and also account for the covariance brought about from overlapping samples across years in an appropriate and valid way.

Using the replicate weights to generate replicate standard errors provides approximately design-unbiased estimates for the variance for any estimate, including subgroup estimates, cross-year comparisons, cross-subgroup comparisons, etc. These standard errors based on the replicate weights were used to produce the confidence intervals in this report and for conducting the statistical tests used for comparisons described above. The methodology for the three statistical tests is as follows:

[107] As a reminder, the same samples of districts and schools were used for the 2011 and 2012 survey administrations. The 2011 surveys asked about the 2009-10 and 2010-11 school years. The 2012 surveys asked about the 2011-12 school year.

Methodology for the year-to-year comparisons of district estimates and comparisons of school estimates

Given that (1) we drew one sample of districts and one sample of schools that were subsequently followed and (2) the analyses rely on the cross-sectional data, we cannot use either the standard t-test for independent samples or a paired t-test for dependent samples to test whether year-to-year changes in the percentage of districts (or schools) are significantly different.[108] Rather than calculating the difference in whether an individual district or school met the indicator in one year compared to another year (as we would for a paired t-test), we calculated the estimated percentage meeting an indicator across all district (or school) respondents. We then examined the weighted difference in the estimated percentages at two time points. We calculated weighted differences using the replicate weights, computed the standard errors of the differences, and then ran a two-sided test with confidence level 95 percent for the difference of estimates. That is, we tested whether the difference between the percentage estimate for an indicator in one year and the percentage estimate for the same indicator in another year is zero. The results for these statistical tests are presented in the chapter figures and in appendix tables for each assurance area.

Methodology for statistical tests for subgroup-to-subgroup comparisons of district and school estimates

For the subgroup domains that coincided exactly with the sampling strata (e.g., high-poverty district versus districts with other poverty levels), we applied replicate weights and used a standard t-test for independent samples to determine whether the percentages of districts (or schools) in different domains are significantly different. For subgroup domains that do not coincide exactly with the sampling strata, a t-test for independent samples is not precise, as we need to account for the covariance between the estimates that may exist. For these comparisons, we used the same approach for the year-to-year comparisons described above that accounts for non-zero covariance. The results for these statistical tests are presented in the chapter figures and in appendix tables for each assurance area.

Methodology for statistical tests for within year indicator-to indicator (or challenge-to-challenge) comparisons of district and school estimates

Tests of differences were made within years between indicators (and challenges) within assurance areas. These comparisons were similar to the across-year estimates in that the two sample sets were similar, but slightly different. This difference comes from differing patterns of missingness across indicators (or challenges). In some cases, an indicator would be missing for a given sample unit in a given year, and in other cases, not. We carried out the same procedure of creating replicate estimates of the differences of the indicators (or challenges), generating a standard error from those replicate differences, and then ran the test for the difference of estimates. The results for these statistical tests are found in the appendix for each assurance area.

[108] Because more units are the same respondents for the 2009-10/2010-11 data and the 2011-12 data compared to the situation when two independent samples are drawn (which would share members only at random), the covariances between years are likely to be far larger than what is assumed when applying an independent samples t-test. A paired t-test would account for the covariance in the dependent sample, but would require limiting the analysis to the longitudinal sample.

References

Brick, M., Morganstein, D., and Valliant, R. (2000). *Analysis of complex sample data using replication*. Rockville, MD: Westat.

Cochran, W. G. (1977). *Sampling Techniques, 3rd ed.* New York: John Wiley & Sons.

Deville, J.-C., and Tillé, Y. (2004). Efficient balanced sampling: The cube method. *Biometrika 91, 4*, 893-912.

Deville, J. C. and Tillé, I. (2005). Variance approximation under balanced sampling. *Journal of Statistical Planning and Inference 128*, pp. 569-591.

Fay, R. E. (1989). Theory and application of replicate weighting for variance calculations. *Proceedings of the Section on Survey research Methods, American Statistical Association,* 212-218.

Harville, D. A. (1997). *Matrix Algebra from a Statistician's Perspective.* New York: Springer-Verlag.

Kim, J-K., and Wu, C. (2011). Sparse and efficient replication variance estimation for complex surveys. Unpublished manuscript provided to us by author.

Rizzo, L., and Judkins, D. (2004). Replicate variance estimation for the National Survey of Parents and Youths. *Proceedings of the Section on Survey Research Methods of the American Statistical Association*, 4257-4263.

Rizzo, L., and Rust, K. (2011). "Development of a first-stage finite population correction in the variance estimator for a two-stage PPS design". *Proceedings of the Section on Survey Methods, American Statistical Association*, upcoming.

U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2008). *State and Local Implementation of the* No Child Left Behind Act, *Volume IV—Title I School Choice and Supplemental Educational Services: Interim Report*, Washington, D.C.: Author. Available from: https://www2.ed.gov/rschstat/eval/choice/nclb-choice-ses/nclb-choice-ses.pdf

Valliant, R., Dever, J., Kreuter, F. (2013). *Practical Tools for Designing and Weighting Survey Samples.* New York: Springer.

This page is intentionally blank.

Appendix B
Indicators, Components, and Recovery Act Program Requirements

This page intentionally blank.

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level

Indicator	Components[1]	Recovery Act program requirements
SEA level		
State had adopted the Common Core State Standards (CCSS) in mathematics and reading/English language arts	Adopted the CCSS in mathematics and English language arts ***Source:*** *2011 SEA survey, items 1 and 3*	RTT selection criteria (B)(1) The extent to which the State has demonstrated its commitment to adopting a common set of high-quality standards, evidenced by— (i) The State's participation in a consortium of States that— (a) Is working toward jointly developing and adopting a common set of K-12 standards that are supported by evidence that they are internationally benchmarked and build toward college and career readiness by the time of high school graduation; and (b) Includes a significant number of States;
SEA provided, guided or funded professional development on the Common Core State Standards	Adopted the CCSS in mathematics and English language arts and reported at least one of the following professional development activities: • State-developed professional development on CCSS to LEAs in-person • State-developed professional development on CCSS to LEAs online • Guidance and technical assistance to LEAs on the design and implementation of professional development • "Train-the-trainer" sessions to lead LEA staff • Funding for LEA-designed professional development on standards ***Source:*** *2011 SEA survey, items 1 and 5*	RTT selection criterion (B)(1) The extent to which the State has demonstrated its commitment to adopting a common set of high-quality standards, evidenced by— (i) The State's participation in a consortium of States that— (a) Is working toward jointly developing and adopting a common set of K-12 standards that are supported by evidence that they are internationally benchmarked and build toward college and career readiness by the time of high school graduation RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments tied to these standards. State or LEA activities might, for example, include: … developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments.

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements

SEA provided instructional materials or curriculum assistance for the Common Core State Standards	Adopted the CCSS in mathematics and English language arts and reported at least one of the following support activities:
	• Identified, developed, and/or distributed materials (e.g., curriculum guides, pacing guides, textbooks) aligned with the standards that:
	  ○ LEAs are required to use
	  ○ LEAs may choose to use
	• Provided resources or technical assistance to help LEAs map curriculum taught to new or revised content standards
	
	Source: *2011 SEA survey, items 1 and 5*
		RTT selection criterion (B)(1)
		The extent to which the State has demonstrated its commitment to adopting a common set of high-quality standards, evidenced by—
		(i) The State's participation in a consortium of States that—
		(a) Is working toward jointly developing and adopting a common set of K-12 standards that are supported by evidence that they are internationally benchmarked and build toward college and career readiness by the time of high school graduation
		
		RTT selection criterion (B)(3)
		The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards ... State or LEA activities might, for example, include: … developing or acquiring, disseminating, and implementing high-quality instructional materials and assessments (including, for example, formative and interim assessments) … and engaging in other strategies that translate the standards and information from assessments into classroom practice for all students, including high-need students.

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
State was a member of a federally-funded consortium developing assessments aligned to the Common Core State Standards	Adopted the CCSS in mathematics and English language arts and reported working with a Federally-funded assessment consortium. ***Source:*** *2011 SEA survey, items 1 and 6*	RTT selection criterion (B)(1) The extent to which the State has demonstrated its commitment to adopting a common set of high-quality standards, evidenced by— (i) The State's participation in a consortium of States that— (a) Is working toward jointly developing and adopting a common set of K-12 standards that are supported by evidence that they are internationally benchmarked and build toward college and career readiness by the time of high school graduation RTT selection criterion (B)(2) The extent to which the State has demonstrated its commitment to improving the quality of its assessments, evidenced by the State's participation in a consortium of States that— (i) Is working toward jointly developing and implementing common, high-quality assessments aligned with the consortium's common set of K-12 standards
District level		
District aware of state adoption of Common Core Standards	District is in a state that adopted the Common Core and district reported that its state had adopted the Common Core State Standards. ***Sources:*** *2011 SEA survey, item 1 and 2011 District Survey, item 13*	This indicator is not directly linked to the language of the Recovery Act, although it is clearly implied (see, for example, ARRA Section 14003).

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
District distributed instructional materials or provided selection guidance on curricula aligned with the new or revised state content standards	District is in a state that adopted the Common Core and district distributed or provided to schools with at least one of the following: • Instructional materials aligned with new or revised state standards in mathematics • Instructional materials aligned with new or revised state standards in reading/English language arts • Criteria for schools to use when selecting a new curriculum aligned with the new or revised state standards for mathematics • Criteria for schools to use when selecting a new curriculum aligned with the new or revised state standards for reading/English language arts. ***Sources:*** *2011 SEA survey, item 1 and 2011 District Survey, item 16*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments tied to these standards. State or LEA activities might, for example, include: … developing or acquiring, disseminating and implementing high-quality instructional materials and assessments…developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments. Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 3—Innovations That Complement the Implementation of High Standards and High-Quality Assessments Under this priority, the Department provides funding for practices, strategies, or programs that are designed to support States' efforts to transition to standards and assessments that measure students' progress toward college- and career-readiness, including curricular and instructional practices, strategies, or programs in core academic subjects (as defined in section 9101(11) of the ESEA) that are aligned with high academic content and achievement standards and with high quality assessments based on those standards. Proposed projects may include, but are not limited to, practices, strategies, or programs that are designed to: (c) translate the standards and information from assessments into classroom practices that meet the needs of all students, including high-need students.

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
District provided professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts	District is in a state that adopted the Common Core and reported providing at least one of the following professional development activities: • In-person professional development on the new or revised state standards for teachers who teach mathematics • Internet-based professional development on the new or revised state standards for educators who teach or mentor in mathematics • In-person professional development on the new or revised state standards for teachers who teach reading/English language arts • Internet-based professional on the new or revised state standards for educators who teach or mentor in reading/English language arts. ***Sources:*** *2011 SEA survey, item 1 and 2011 District Survey, item 17*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments tied to these standards. State or LEA activities might, for example, include:…developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments. Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 3—Innovations That Complement the Implementation of High Standards and High-Quality Assessments Under this priority, the Department provides funding for practices, strategies, or programs that are designed to support States' efforts to transition to standards and assessments that measure students' progress toward college- and career-readiness, including curricular and instructional practices, strategies, or programs in core academic subjects (as defined in section 9101(11) of the ESEA) that are aligned with high academic content and achievement standards and with high quality assessments based on those standards. Proposed projects may include, but are not limited to, practices, strategies, or programs that are designed to: (c) translate the standards and information from assessments into classroom practices that meet the needs of all students, including high-need students.

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
District provided professional development on new or revised state content standards on instructional strategies for teachers to help English learners or students with disabilities master the content standards	District is in a state that adopted the Common Core and reported providing at least one of the following professional development activities: • Internet-based professional development on instructional strategies for teachers specifically designed to help English language learners master new or revised state content standards • In-person professional development on instructional strategies for teachers specifically designed to help English language learners master new or revised state content standards • Internet-based professional development on instructional strategies for teachers specifically designed to help students with disabilities master new or revised state content standards • In-person professional development on instructional strategies for teachers specifically designed to help students with disabilities master new or revised state content standards. ***Sources:*** *2011 SEA survey, item 1 and 2011 District Survey, item 17*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments tied to these standards. State or LEA activities might, for example, include:…developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments. Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 3—Innovations That Complement the Implementation of High Standards and High-Quality Assessments Under this priority, the Department provides funding for practices, strategies, or programs that are designed to support States' efforts to transition to standards and assessments that measure students' progress toward college- and career-readiness, including curricular and instructional practices, strategies, or programs in core academic subjects (as defined in section 9101(11) of the ESEA) that are aligned with high academic content and achievement standards and with high quality assessments based on those standards. Proposed projects may include, but are not limited to, practices, strategies, or programs that are designed to: (c) translate the standards and information from assessments into classroom practices that meet the needs of all students, including high-need students.

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Competitive Preference Priority 7—Innovations To Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to address the unique learning needs of students with disabilities, including those who are assessed based on alternate academic achievement standards, or the linguistic and academic needs of limited English proficient students. To meet this priority, applications must provide for the implementation of particular practices, strategies, or programs that are designed to improve academic outcomes, close achievement gaps, and increase college- and career-readiness, including increasing high school graduation rates (as defined in this notice), for students with disabilities or limited English proficient students. Final requirements for School Improvement Grants (2010 Notice) (1)(vii) under SIG transformation model permissible activities "Provide additional supports and professional development to teachers and principals in order to implement effective strategies to support students with disabilities in the least restrictive environment and to ensure that limited English proficient students acquire language skills to master academic content."

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
School level		
Teachers received professional development on new and revised state content standards	Reported using at least one of the following professional development activities: • In-person professional development for teachers on the new or revised content standards for mathematics • Internet-based professional development for educators on the new or revised content standards for mathematics • In-person professional development for teachers on the new or revised content standards for reading/English language arts • Internet-based professional development for educators on the new or revised content standards for reading/English language arts. ***Sources:*** *2011 School Survey, item 15*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments tied to these standards. State or LEA activities might, for example, include:…developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments. Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 3—Innovations That Complement the Implementation of High Standards and High-Quality Assessments Under this priority, the Department provides funding for practices, strategies, or programs that are designed to support States' efforts to transition to standards and assessments that measure students' progress toward college- and career-readiness, including curricular and instructional practices, strategies, or programs in core academic subjects (as defined in section 9101(11) of the ESEA) that are aligned with high academic content and achievement standards and with high quality assessments based on those standards. Proposed projects may include, but are not limited to, practices, strategies, or programs that are designed to: (c) translate the standards and information from assessments into classroom practices that meet the needs of all students, including high-need students.

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
Teacher received professional development targeted to help English learners or students with disabilities master new or revised state content standards	Reported targeting professional development specifically designed to help at least one of the following student groups: • Help English language learners master new or revised state content standards • Help students with disabilities master new or revised state content standards ***Sources:*** *2011 School Survey, item 16*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments tied to these standards. State or LEA activities might, for example, include:…developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments. Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 3—Innovations That Complement the Implementation of High Standards and High-Quality Assessments Under this priority, the Department provides funding for practices, strategies, or programs that are designed to support States' efforts to transition to standards and assessments that measure students' progress toward college- and career-readiness, including curricular and instructional practices, strategies, or programs in core academic subjects (as defined in section 9101(11) of the ESEA) that are aligned with high academic content and achievement standards and with high quality assessments based on those standards. Proposed projects may include, but are not limited to, practices, strategies, or programs that are designed to: (c) translate the standards and information from assessments into classroom practices that meet the needs of all students, including high-need students.

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Competitive Preference Priority 7—Innovations To Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to address the unique learning needs of students with disabilities, including those who are assessed based on alternate academic achievement standards, or the linguistic and academic needs of limited English proficient students. To meet this priority, applications must provide for the implementation of particular practices, strategies, or programs that are designed to improve academic outcomes, close achievement gaps, and increase college- and career-readiness, including increasing high school graduation rates (as defined in this notice), for students with disabilities or limited English proficient students. Final requirements for School Improvement Grants (2010 Notice) (1)(vii) under SIG transformation model permissible activities "Provide additional supports and professional development to teachers and principals in order to implement effective strategies to support students with disabilities in the least restrictive environment and to ensure that limited English proficient students acquire language skills to master academic content."

(continued)

Table B-1. Standards and assessments indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
School used curriculum materials aligned with new or revised state content standards	Reported using at least one of the following practices to implement new or revised state content standards: • Curriculum frameworks or pacing guides aligned with the new or revised standards for mathematics • Curriculum aligned with the new or revised standards for mathematics • Curriculum frameworks or pacing guides aligned with the new or revised standards for reading/English language arts • Curriculum aligned with the new or revised standards for reading/English language arts. ***Sources:*** *2011 School Survey, item 15*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards that build toward college and career readiness by the time of high school graduation, and high-quality assessments tied to these standards. State or LEA activities might, for example, include: … developing or acquiring, disseminating and implementing high-quality instructional materials and assessments. Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 3—Innovations That Complement the Implementation of High Standards and High-Quality Assessments Under this priority, the Department provides funding for practices, strategies, or programs that are designed to support States' efforts to transition to standards and assessments that measure students' progress toward college- and career-readiness, including curricular and instructional practices, strategies, or programs in core academic subjects (as defined in section 9101(11) of the ESEA) that are aligned with high academic content and achievement standards and with high quality assessments based on those standards. Proposed projects may include, but are not limited to, practices, strategies, or programs that are designed to: (c) translate the standards and information from assessments into classroom practices that meet the needs of all students, including high-need students.

[1] For indicators where the source is 2011 SEA survey, the text listed in the components column is the actual survey item wording.

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level

Indicator	Components[1]	Recovery Act program requirements
SEA level		
State operated a longitudinal data system that included 12 core components	Had all 12 components of a statewide longitudinal data system outlined in the America COMPETES Act: • Uses unique student identifier • Contains student-level enrollment, demographic, and program participation information • Contains exit, drop out, transfer, and completion information of P-16 programs • Communicates with higher education • Assesses data quality, validity, reliability • Contains yearly test records • Contains information on students not tested • Uses teacher identification systems and can match them with students • Contains student-level transcript information • Contains college readiness test scores • Contains information on students' transition from high school to postsecondary institutions • Contains other information to determine alignment and preparedness for success in postsecondary education ***Source:*** *U.S. Department of Education, State Fiscal Stabilization Fund Initial Annual State Reports (2009-10) and Amended Applications (2010-11)*	RTT selection criterion (C)(1) The extent to which the State has a statewide longitudinal data system that includes all of the America COMPETES Act elements. SFSF indicator (b)(1) Which of the 12 elements described in section 6401(e)(2)(D) of the America COMPETES Act (20 U.S.C. 9871) are included in the State's statewide longitudinal data system. SLDS request for applications (NCES 09-02 IV) Any statewide, longitudinal data system to be supported with funds made available pursuant to this competition (Grants for Statewide, Longitudinal Data Systems under ARRA) must meet the requirements described below…Required data system elements: A data system developed with funding obtained pursuant to this grant competition must include at least these 12 elements prescribed by the America COMPETES Act:

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
State data system had ability to link teachers to student data	Had a longitudinal data system with teacher identifiers and the ability to match teachers to students ***Source:*** *U.S. Department of Education, State Fiscal Stabilization Fund Initial Annual State Reports (2009-10) and Amended Applications (2010-11)*	RTT selection criterion (C)(1) The extent to which the State has a statewide longitudinal data system that includes all of the America COMPETES Act elements. SFSF indicator (b)(1) Which of the 12 elements described in section 6401(e)(2)(D) of the America COMPETES Act (20 U.S.C. 9871) are included in the State's statewide longitudinal data system. Teacher Incentive Fund core element D (2010 Application)[2] A data-management system that can link student achievement (as defined in this notice) data to teacher and principal payroll and human resources systems. SLDS request for applications (NCES 09-02 IV) Any statewide, longitudinal data system to be supported with funds made available pursuant to this competition (Grants for Statewide, Longitudinal Data Systems under ARRA) must meet the requirements described below…Required data system capabilities: The system must link student data with teachers, i.e., it must enable the matching of teachers and students so that a given student may be matched with the particular teachers primarily responsible for providing instruction in various subjects.

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
SEA facilitated educators' access to assessment data	Reported at least one of the following to facilitate access to new or existing assessment data: • Providing educators with key LEA, school and student indicators through report cards, data dashboards, or other feedback and analysis systems • Establishing and maintaining state data systems that share longitudinal data on students with local data systems ***Source:*** *2011 SEA survey, item 9*	RTT selection criterion (C)(2) The extent to which the State has a high-quality plan to ensure that data from the State's statewide longitudinal data system are accessible to, and used to inform and engage, as appropriate, key stakeholders (e.g., parents, students, teachers, principals, LEA leaders, community members, unions, researchers, and policymakers); and that the data support decision-makers in the continuous improvement of efforts in such areas as policy, instruction, operations, management, resource allocation, and overall effectiveness. RTT selection criterion (C)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan to— (i) Increase the acquisition, adoption, and use of local instructional improvement systems that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness; (iii) Make the data from instructional improvement systems, together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (e.g., students with disabilities, English language learners, students whose achievement is well below or above grade level). SLDS request for applications (NCES 09-02 IV) Any statewide, longitudinal data system to be supported with funds made available pursuant to this competition (Grants for Statewide, Longitudinal Data Systems under

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		ARRA) must meet the requirements described below…Required data system capabilities: The system must enable data to be easily generated for continuous improvement and decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students.
SEA provided professional development or technical assistance to support educators' use of assessment data	Reported providing at least one of the following through state-developed professional development or guidance/technical assistance to LEAs on: • Strategies and procedures for LEA staff to use in accessing new or existing state assessment data • Use of new or existing assessment data by teachers to improve instruction (including interim/formative assessments) • Use of new or existing assessment data by principals and school leaders in school improvement planning ***Source:*** *2011 SEA survey, item 9*	RTT selection criterion (C)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan to— … (ii) Support participating LEAs and schools that are using instructional improvement systems in providing effective professional development to teachers, principals and administrators on how to use these systems and the resulting data to support continuous instructional improvement …
District level		
District used longitudinal data to track student achievement gains for individual teachers	Reported the following strategy for using assessment results: • Using longitudinal data to track student achievement gains for individual teachers. ***Source:*** *2011 District Survey, item 21*	RTT selection criterion (C)(2) The extent to which the State has a high-quality plan to ensure that data from the State's statewide longitudinal data system are accessible to, and used to inform and engage, as appropriate, key stakeholders (e.g., parents, students, teachers, principals, LEA leaders, community members, unions, researchers, and policymakers); and that the data support decision-makers in the continuous improvement of efforts in such areas as policy, instruction, operations, management, resource allocation, and overall effectiveness.

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 2—Innovations That Improve the Use of Data Under this priority, the Department provides funding to support strategies, practices, or programs that are designed to (a) encourage and facilitate the evaluation, analysis, and use of student achievement or student growth data by educators, families, and other stakeholders in order to inform decision making and improve student achievement, student growth, or teacher, principal, school, or LEA performance and productivity.
District provided educators' with access to assessment data	Reported using at least one of the following strategies for using assessment results: • Providing teachers with on-line access to individual student results from state summative assessments • Providing teachers with on-line access to individual student results from district summative assessments • Providing teachers with on-line access to individual student results from interim assessments • Providing educators with key aggregate student and school indicators through report cards, data dashboards, or other feedback and analysis systems. ***Sources:*** *2011 District Survey, item 21*	RTT selection criterion (C)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan to— (i) Increase the acquisition, adoption, and use of local instructional improvement systems that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness; (iii) Make the data from instructional improvement systems, together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (e.g., students with disabilities, English language learners, students whose achievement is well below or above grade level).

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Final requirements for School Improvement Grants (2010 Notice) (1)(vii) under SIG turnaround model and (2)(i)(B) under SIG transformation model permissible activities "Promote the continuous use of student data (such as from formative, interim, and summative assessments) to inform and differentiate instruction in order to meet the academic needs of individual students."
District provided educators' with professional development on the use of assessment data for instructional planning	Reported providing at least one of the following professional development activities: • Providing professional development focused on using summative assessment results for instructional planning • Providing professional development focused on using interim assessment results for instructional planning. ***Source:*** *2011 District Survey, item 11*	**Promoted by the Recovery Act via:** RTT selection criterion (C)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan to— (i) Increase the acquisition, adoption, and use of local instructional improvement systems that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness; (iii) Make the data from instructional improvement systems, together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (e.g., students with disabilities, English language learners, students whose achievement is well below or above grade level).

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
School level		
School used longitudinal data to track student achievement gains for individual teachers	Reported the following assessment data practice: • Using longitudinal data to track student achievement gains for individual teachers. ***Source:*** *2011 School Survey, item 18*	RTT selection criterion (C)(2) The extent to which the State has a high-quality plan to ensure that data from the State's statewide longitudinal data system are accessible to, and used to inform and engage, as appropriate, key stakeholders (e.g., parents, students, teachers, principals, LEA leaders, community members, unions, researchers, and policymakers); and that the data support decision-makers in the continuous improvement of efforts in such areas as policy, instruction, operations, management, resource allocation, and overall effectiveness. Investing in Innovation Fund: Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. Absolute Priority 2—Innovations That Improve the Use of Data Under this priority, the Department provides funding to support strategies, practices, or programs that are designed to (a) encourage and facilitate the evaluation, analysis, and use of student achievement or student growth data by educators, families, and other stakeholders in order to inform decision making and improve student achievement, student growth, or teacher, principal, school, or LEA performance and productivity.
Teachers had on-line access to student assessment results	Reported that teachers have on-line access to individual student results from at least one of the following: • state summative assessments • district summative assessments • interim assessments. ***Source:*** *2011 School Survey, item 18*	RTT selection criterion (C)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan to— (i) Increase the acquisition, adoption, and use of local instructional improvement systems that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness;

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		(iii) Make the data from instructional improvement systems, together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (e.g., students with disabilities, English language learners, students whose achievement is well below or above grade level). <u>Final requirements for School Improvement Grants (2010 Notice) (1)(vii) under SIG turnaround model and (2)(i)(B) under SIG transformation model permissible activities</u> "Promote the continuous use of student data (such as from formative, interim, and summative assessments) to inform and differentiate instruction in order to meet the academic needs of individual students."
School used student assessment data to tailor instruction	Reported the following strategy for improving instruction: • Using student assessment data to tailor instruction in the classroom. ***Source:*** *2011 School Survey, item 11*	<u>RTT selection criterion (C)(3)</u> The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan to— (i) Increase the acquisition, adoption, and use of local instructional improvement systems that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness; (iii) Make the data from instructional improvement systems, together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (e.g., students with disabilities,

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level s (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		English language learners, students whose achievement is well below or above grade level). Final requirements for School Improvement Grants (2010 Notice) (1)(vii) under SIG turnaround model and (2)(i)(B) under SIG transformation model permissible activities "Promote the continuous use of student data (such as from formative, interim, and summative assessments) to inform and differentiate instruction in order to meet the academic needs of individual students."
School used student assessment data to identify students for additional support	Reported the following strategy for improving instruction and related student services: • Using student assessment data to identify students for additional support. ***Source:*** *2011 School Survey, item 11*	RTT selection criterion (C)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan to— (i) Increase the acquisition, adoption, and use of local instructional improvement systems that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, and overall effectiveness; (iii) Make the data from instructional improvement systems, together with statewide longitudinal data system data, available and accessible to researchers so that they have detailed information with which to evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students (e.g., students with disabilities, English language learners, students whose achievement is well below or above grade level).

(continued)

Table B-2. Data systems indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Final requirements for School Improvement Grants (2010 Notice) (1)(vii) under SIG turnaround model and (2)(i)(B) under SIG transformation model permissible activities "Promote the continuous use of student data (such as from formative, interim, and summative assessments) to inform and differentiate instruction in order to meet the academic needs of individual students."

[1] For indicators where the source is 2011 SEA survey, the text listed in the components column is the actual survey item wording.

[2] Given the Teacher Incentive Fund program's emphasis on this component of longitudinal data systems, it was examined as a separate indicator in addition to being included in the previous indicator.

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level

Indicator	Components[1]	Recovery Act program requirements
SEA level		

SEA simplified/shortened educator licensure process or authorized non-university preparation programs	Reported at least one of the following:
	• Simplifying or shortening the process of obtaining full licensure and/or certification (e.g., require fewer credit hours)for:
	  ○ State university based teacher preparation programs
	  ○ Alternative pathway teacher preparation programs
	• Authorizing independent providers
	
	Source: *2011 SEA survey, item 23*
		RTT selection criterion (D)(1)
		The extent to which the State has—
		(i) Legal, statutory, or regulatory provisions that allow alternative routes* to certification for teachers and principals, particularly routes that allow for providers in addition to institutions of higher education
		(ii) Alternative routes to certification that are in use
		
		* definition includes "significantly limit the amount of coursework required or have options to test out of courses."

SEA issued standards or guidelines for teacher preparation programs	Reported issuing standards or guidelines for pre-service teacher preparation programs in at least one of the following: • Alignment with new or revised state content standards • Alignment with state teacher standards • Provision of training on practices specifically related to improving low-performing schools • Tracking the effectiveness of graduates based on student achievement gains and making these data publicly available ***Source:*** *2011 SEA survey, item 23*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards … State or LEA activities might, for example, include: …developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments. RTT selection criterion (D)(4) The extent to which the State has a high-quality plan and ambitious yet achievable annual targets to— (i) Link student achievement and student growth (both as defined in this notice) data to the students' teachers and principals, to link this information to the in-State programs where those teachers and principals were prepared for credentialing, and to publicly report the data for each credentialing program in the State;

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Because states have a traditional role in reviewing and approving educator preparation programs, it was relevant for the study to ask states what they were doing to align preparation programs with these standards.
SEA issued standards or guidelines for principal preparation programs	Reported issuing standards or guidelines for pre-service principal/school leader preparation programs to promote <u>at least one</u> of the following: • Alignment with new or revised state content standards • Alignment with state principal/school leader standards • Provision of training on practices specifically related to improving low-performing schools • Tracking the effectiveness of graduates based on student achievement gains and making the these data publicly available ***Source:*** *2011 SEA survey, item 23*	RTT selection criterion (B)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan for supporting a statewide transition to and implementation of internationally benchmarked K-12 standards … State or LEA activities might, for example, include: …developing or acquiring and delivering high-quality professional development to support the transition to new standards and assessments. <u>RTT selection criterion (D)(4)</u> The extent to which the State has a high-quality plan and ambitious yet achievable annual targets to— (i) Link student achievement and student growth (both as defined in this notice) data to the students' teachers and principals, to link this information to the in-State programs where those teachers and principals were prepared for credentialing, and to publicly report the data for each credentialing program in the State.
SEA supported use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation	Reported <u>at least one</u> of the following <u>role(s)</u>: • Administering a state-developed teacher evaluation system in which LEA participation is required • Administering a state-developed teacher evaluation system in which LEA participation is optional	<u>RTT eligibility requirement (b)</u> At the time the State submits its application, there are no legal, statutory, or regulatory barriers at the State level to linking data on student achievement (as defined in this notice) or student growth (as defined in this notice) to teachers and principals for the purpose of teacher and principal evaluation.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	• Setting evaluation system standards and guidelines for LEA-designed teacher evaluation systems that are required • Setting evaluation system standards and guidelines for LEA-designed teacher evaluation systems that are optional • Providing guidance and technical assistance to LEAs on the design and implementation of their systems • Requiring LEAs to submit teacher evaluation design and implementation plans for SEA approval • Requiring LEAs to report on teacher evaluation system operations and effectiveness And included all of the following component(s) in the state evaluation system, standards, guidance, or technical assistance: • A rating scale/rubric with three or more performance levels to evaluate instruction/practice • At least two yearly observations of classroom instruction with written feedback • Student achievement gains in NCLB grades/subjects used in determining individual teacher performance ratings ***Source:*** *2011 SEA survey, items 15 and 16*	RTT selection criterion (D)(2) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; SFSF indicator (a)(3) Whether the systems used to evaluate the performance of teachers include student achievement outcomes or student growth data as an evaluation criterion. Teacher Incentive Fund core element C (2010 Application) Rigorous, transparent, and fair evaluation systems for teachers and principals that differentiate effectiveness using multiple rating categories that take into account student growth (as defined in this notice) as a significant factor, as well as classroom observations conducted at least twice during the school year.
SEA supported use of student achievement gains for principal evaluation	Reported at least one of the following roles: • Administering a state principal evaluation system in which LEA participation is required • Administering a state principal evaluation system in which LEA participation is optional	RTT eligibility requirement (b) At the time the State submits its application, there are no legal, statutory, or regulatory barriers at the State level to linking data on student achievement (as defined in this notice) or student growth (as defined in this notice) to teachers and principals for the purpose of teacher and principal evaluation.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	• Setting principal evaluation system standards and guidelines that LEA-designed systems are required to meet • Setting principal evaluation system standards and guidelines that LEA-designed systems may choose to meet • Providing guidance and technical assistance to LEAs on system design and implementation, including providing model principal evaluation systems that LEAs may choose to use all or in part • Requiring LEAs to submit principal evaluation system design and implementation plans for SEA approval • Requiring LEAs to report on principal evaluation system operations and effectiveness And included the following component in the state evaluation system, standards, guidance, or technical assistance: • Student achievement gains or growth used to determine principals' performance ratings ***Source:*** *2011 SEA survey, items 17 and 18*	RTT selection criterion (D)(2) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; SFSF indicator (a)(6) Whether the systems used to evaluate the performance of principals include student achievement outcomes or student growth data as an evaluation criterion. Teacher Incentive Fund core element C (2010 Application) Rigorous, transparent, and fair evaluation systems for teachers and principals that differentiate effectiveness using multiple rating categories that take into account student growth (as defined in this notice) as a significant factor, as well as classroom observations conducted at least twice during the school year.
SEA supported differentiating teacher compensation based on student achievement gains	Reported at least one of the following roles: • Administering a state-developed teacher compensation system in which LEA participation is required or optional • Setting teacher compensation system standards and guidelines that are either required or optional for LEAs • Providing guidance and technical	RTT selection criterion (D)(2) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (iv) Use these evaluations, at a minimum, to inform decisions regarding— (b) Compensating, promoting, and

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	assistance to LEAs on teacher compensation system design and implementation • Requiring LEAs to submit teacher compensation system design and implementation plans for SEA approval • Requiring LEAs to report on teacher compensation system operations and effectiveness And included one or more of the following components in state-developed system, standards, guidelines, or technical assistance: • Base pay increases, add-ons, or stipends based in part on achievement gains of students in individual teachers' classes • One-time bonuses for achievement gains of students in individual teachers' classes • One-time bonuses for achievement gains of students served by teacher teams • One-time bonuses for average achievement gains of all students in a school ***Source:*** *2011 SEA survey, items 19 and 20*	retaining teachers and principals, including by providing opportunities for highly effective teachers and principals (both as defined in this notice) to obtain additional compensation and be given additional responsibilities; Teacher Incentive Fund Absolute Priority 1 (2010 Application) Priority 1 (Absolute) -- Differentiated Levels of Compensation for Effective Teachers and Principals: To meet this absolute priority, an applicant must demonstrate, in its application, that it will develop and implement a performance-based compensation system (PBCS) that rewards, at differentiated levels, teachers and principals who demonstrate their effectiveness by improving student achievement (as defined in this notice) as part of the coherent and integrated approach of the local educational agency (LEA) to strengthening the educator workforce.
District level		
District provided school leaders with professional development or flexibility to hire effective teachers	Reported using at least one of the following strategies to support teacher recruitment and hiring: • Focus recruitment efforts on new teachers from university-based preparation programs that have evidence of the effectiveness of its graduates based on their students' achievement gains • Make available or provide and hire effective teachers	**Promoted by the Recovery Act via:** Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2): Permissible district activities under the SIG transformation model C) Ensuring that the school is not required to accept a teacher without the (mutual consent of the teacher and principal, regardless of the teacher's seniority.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	• Make available or provide ongoing professional development for principals on how they can identify, recruit, and hire effective teachers • Provide school leaders with the authority to hire more qualified transfer candidates without regard to district seniority status ***Sources:*** *2011 District Survey, items 2 and 3*	RTT Priority 6: Invitational Priority The Secretary is particularly interested in applications in which the State's participating LEAs seek to create the conditions for reforms and innovation as well as the conditions for learning by providing schools with flexibility and autonomy in such areas as (i) selecting staff. Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010, Absolute Priority 1--Innovations That Support Effective Teachers and Principals Under this priority, the Department provides funding to support practices, strategies, or programs that are designed to increase the number or percentages of teachers or principals who are highly effective teachers or principals or reduce the number or percentages of teachers or principals who are ineffective, especially for teachers of high-need students, by … recruiting …highly effective teachers or principals.
District operated a teacher evaluation system that included multi-level rubrics, multiple observations, and student achievement gains	Reported that its educator performance evaluation system included all of the following components: • Teacher evaluation system uses a rating scale or rubric that defines three or more performance levels to evaluate classroom instruction or practice • Teacher evaluation system includes at least two yearly observations of classroom instruction with written feedback	Teacher Incentive Fund core element C (2010 Application) Rigorous, transparent, and fair evaluation systems for teachers and principals that differentiate effectiveness using multiple rating categories that take into account student growth (as defined in this notice) as a significant factor, as well as classroom observations conducted at least twice during the school year.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	• Teacher evaluation system includes student achievement gains in NCLB grades/subjects in determining individual teacher performance ratings ***Sources:*** *2011 District Survey, item 5*	RTT selection criterion (D)(2) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; SFSF indicator (a)(3) Whether the systems used to evaluate the performance of teachers include student achievement outcomes or student growth data as an evaluation criterion. (note that SFSF reporting requirements provide for district reporting of whether the systems used to evaluate the performance of teachers include student achievement outcomes as an evaluation criterion; see State Fiscal Stabilization Fund: Summary of Proposed Data and Information Requirements. U.S. Department of Education July 29, 2009) Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010, Absolute Priority 1--Innovations That Support Effective Teachers and Principals Under this priority, the Department provides funding to support practices, strategies, or programs that are designed to increase the number or percentages of teachers or principals who are highly effective teachers or principals or reduce the number or percentages of teachers or principals who are ineffective, especially

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		for teachers of high-need students, by identifying … highly effective teachers or principals (or removing ineffective teachers or principals). In such initiatives, teacher or principal effectiveness should be determined through an evaluation system that is rigorous, transparent, and fair; performance should be differentiated using multiple rating categories of effectiveness; multiple measures of effectiveness should be taken into account, with data on student growth as a significant factor. Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2) Required district activities under the SIG transformation model (i) *Required activities.* The LEA must— (B) Use rigorous, transparent, and equitable evaluation systems for teachers and principals that— (1) Take into account data on student growth as a significant factor as well as other factors such as multiple observation-based assessments of performance and ongoing collections of professional practice reflective of student achievement and increased high school graduations rates.
District operated a principal evaluation system that included student achievement gains	Reported that its educator performance evaluation system included the following component: • Principal evaluation system includes student achievement gains or growth in determining principals' performance ratings ***Sources:*** *2011 District Survey, item 5*	Teacher Incentive Fund core element C (2010 Application) Rigorous, transparent, and fair evaluation systems for teachers and principals that differentiate effectiveness using multiple rating categories that take into account student growth (as defined in this notice) as a significant factor, as well as classroom observations conducted at least twice during the school year.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		RTT selection criterion (D)(2) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; SFSF indicator (a)(6) Whether the systems used to evaluate the performance of principals include student achievement outcomes or student growth data as an evaluation criterion. (Note that SFSF reporting requirements provide for district reporting of whether the systems used to evaluate the performance of principals include student achievement outcomes as an evaluation criterion; see State Fiscal Stabilization Fund: Summary of Proposed Data and Information Requirements. U.S. Department of Education July 29, 2009) Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010, Absolute Priority 1--Innovations That Support Effective Teachers and Principals Under this priority, the Department provides funding to support practices, strategies, or programs that are designed to increase the number or percentages of teachers or principals who are highly

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		effective teachers or principals or reduce the number or percentages of teachers or principals who are ineffective, especially for teachers of high-need students, by identifying … highly effective teachers or principals (or removing ineffective teachers or principals). In such initiatives, teacher or principal effectiveness should be determined through an evaluation system that is rigorous, transparent, and fair; performance should be differentiated using multiple rating categories of effectiveness; multiple measures of effectiveness should be taken into account, with data on student growth as a significant factor. Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2) Required district activities under the SIG transformation model (i) Required activities. The LEA must— (B) Use rigorous, transparent, and equitable evaluation systems for teachers and principals that— (1) Take into account data on student growth as a significant factor as well as other factors such as multiple observation-based assessments of performance and ongoing collections of professional practice reflective of student achievement and increased high school graduations rates.
District differentiated teacher compensation based on student achievement gains	Reported that its educator compensation system included at least one of the following components: • Teacher compensation system provides base pay increases, add-ons, or stipends to teachers based in part on the achievement gains of students in individual teachers' classes	Teacher Incentive Fund Absolute Priority 1 (2010 Application) Priority 1 (Absolute) -- Differentiated Levels of Compensation for Effective Teachers and Principals: To meet this absolute priority, an applicant must demonstrate, in its application, that it will develop and

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	• Teacher compensation system provides one-time bonuses for achievement gains of students in individual teachers' classes • Teacher compensation system provides one-time bonuses for the achievement gains of students served by teacher grade-level or other teams • Teacher compensation system provides one-time bonuses for achievement gains of students school-wide ***Source:*** *2011 District Survey, item 6*	implement a performance-based compensation system (PBCS) that rewards, at differentiated levels, teachers and principals who demonstrate their effectiveness by improving student achievement (as defined in this notice) as part of the coherent and integrated approach of the local educational agency (LEA) to strengthening the educator workforce. RTT selection criterion (D)(2) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; (iv) Use these evaluations, at a minimum, to inform decisions regarding— (b) Compensating, promoting, and retaining teachers and principals, including by providing opportunities for highly effective teachers and principals (both as defined in this notice) to obtain additional compensation and be given additional responsibilities;

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2) : Required district activities under the SIG transformation model (i) Required activities. The LEA must— (C) Identify and reward school leaders, teachers and other staff who, in implementing this model, have increased student achievement and high school graduation rates and identify and remove those who, after ample opportunities have been provided for them to improve their professional development, have not done so; (also a permissible activity under the Turnaround model).
District used student achievement gains for teacher tenure, dismissal, or assignment decisions	Reported that it used at least one of the following in educator tenure, assignment and retention decisions: • Use gains or growth in the achievement of teachers' students in deciding teacher tenure • Use gains or growth in the achievement of teachers' students in deciding teacher dismissal or non-retention with the district • Use gains or growth in the achievement of teachers' students in deciding teacher retention in the school or reassignment to another school ***Source:*** *2011 District Survey, item 7*	RTT Selection Criterion (D)(2)(ii) and (iv)(c) and (d))— The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; (iv) use these evaluations, at a minimum, to inform decisions regarding (c) whether to grant tenure and/or full certification (where applicable) to teachers and principals using rigorous standards and streamlined, transparent, and fair procedures; and (d) removing

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		ineffective tenured and untenured teachers and principals after they have had ample opportunities to improve, and ensuring that such decisions are made using rigorous standards and streamlined, transparent, and fair procedures. SFSF Descriptors (a)(1) The systems used to evaluate the performance of teachers and the use of results from those systems in decisions regarding teacher development, compensation, promotion, retention, and removal. Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010, Absolute Priority 1--Innovations That Support Effective Teachers and Principals Under this priority, the Department provides funding to support practices, strategies, or programs that are designed to increase the number or percentages of teachers or principals who are highly effective teachers or principals or reduce the number or percentages of teachers or principals who are ineffective, especially for teachers of high-need students, by identifying … highly effective teachers or principals (or removing ineffective teachers or principals). In such initiatives, teacher or principal effectiveness should be determined through an evaluation system that is rigorous, transparent, and fair; performance should be differentiated using multiple rating categories of effectiveness; multiple measures of effectiveness should be taken into account, with data on student growth as a significant factor.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
School level		
Teacher evaluation practices included multi-level rubrics, multiple observations, and student achievement gains	Reported that its educator performance evaluation practices included all of the following: • Teacher evaluation practices use a rating scale or rubric that defines three or more performance levels to evaluate classroom instruction or practice • Teacher evaluation practices include at least two yearly observations of classroom instruction with written feedback • Teacher evaluation practices include student achievement gains in NCLB grades/subjects in determining individual teacher performance ratings ***Source:*** *2011 School Survey, item 6*	**Promoted by the Recovery Act via:** Teacher Incentive Fund core element C (2010 Application) Rigorous, transparent, and fair evaluation systems for teachers and principals that differentiate effectiveness using multiple rating categories that take into account student growth (as defined in this notice) as a significant factor, as well as classroom observations conducted at least twice during the school year. RTT selection criterion (D)(2) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; SFSF indicator (a)(3) Whether the systems used to evaluate the performance of teachers include student achievement outcomes or student growth data as an evaluation criterion.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010, Absolute Priority 1--Innovations That Support Effective Teachers and Principals Under this priority, the Department provides funding to support practices, strategies, or programs that are designed to increase the number or percentages of teachers or principals who are highly effective teachers or principals or reduce the number or percentages of teachers or principals who are ineffective, especially for teachers of high-need students, by identifying … highly effective teachers or principals (or removing ineffective teachers or principals). In such initiatives, teacher or principal effectiveness should be determined through an evaluation system that is rigorous, transparent, and fair; performance should be differentiated using multiple rating categories of effectiveness; multiple measures of effectiveness should be taken into account, with data on student growth as a significant factor. Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2): Required district activities under the SIG transformation model (i) Required activities. The LEA must— (B) Use rigorous, transparent, and equitable evaluation systems for teachers and principals that— (Note: schools implementing the transformation model would be required to implement evaluation systems that included student achievement gains)

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		(1) Take into account data on student growth as a significant factor as well as other factors such as multiple observation-based assessments of performance and ongoing collections of professional practice reflective of student achievement and increased high school graduations rates.
Principal evaluation practices included student achievement gains	Reported that its principal evaluation practices included: • Student achievement growth or gains in determining the principal's performance rating ***Source:*** *2011 School Survey, item 6*	<u>Teacher Incentive Fund core element C (2010 Application)</u> Rigorous, transparent, and fair evaluation systems for teachers and principals that differentiate effectiveness using multiple rating categories that take into account student growth (as defined in this notice) as a significant factor, as well as classroom observations conducted at least twice during the school year. <u>RTT selection criterion (D)(2)</u> The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; <u>SFSF indicator (a)(6)</u> Whether the systems used to evaluate the performance of principals include student achievement outcomes or student growth data as an evaluation criterion.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010, Absolute Priority 1--Innovations That Support Effective Teachers and Principals Under this priority, the Department provides funding to support practices, strategies, or programs that are designed to increase the number or percentages of teachers or principals who are highly effective teachers or principals or reduce the number or percentages of teachers or principals who are ineffective, especially for teachers of high-need students, by identifying … highly effective teachers or principals (or removing ineffective teachers or principals). In such initiatives, teacher or principal effectiveness should be determined through an evaluation system that is rigorous, transparent, and fair; performance should be differentiated using multiple rating categories of effectiveness; multiple measures of effectiveness should be taken into account, with data on student growth as a significant factor. Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2): Required district activities under the SIG transformation model (i) *Required activities.* The LEA must— (B) Use rigorous, transparent, and equitable evaluation systems for teachers and principals that— (1) Take into account data on student growth as a significant factor as well as other factors such as multiple observation-based assessments of performance and ongoing collections of professional practice reflective of

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		student achievement and increased high school graduations rates (Note: schools implementing the transformation model would be required to implement a principal evaluation systems that included student achievement gains)
Teacher compensation differentiated based on student achievement gains	Reported that its educator compensation practices included <u>at least one</u> of the following: • Teacher compensation practices include base pay increases, add-ons, or stipends to teachers based in part on achievement gains of students in individual teachers' classes • Teacher compensation practices include one-time bonuses to teachers in addition to base pay for achievement gains of students in individual teachers' classes • Teacher compensation practices include one-time bonuses to teachers in addition to base pay for achievement gains of students served by teacher grade-level or other teams • Teacher compensation practices include one-time bonuses to teachers in addition to base pay for average achievement gains of students school-wide ***Source:*** *2011 School Survey, item 7*	<u>Teacher Incentive Fund Absolute Priority 1 (2010 Application)</u> Priority 1 (Absolute) -- Differentiated Levels of Compensation for Effective Teachers and Principals: To meet this absolute priority, an applicant must demonstrate, in its application, that it will develop and implement a performance-based compensation system (PBCS) that rewards, at differentiated levels, teachers and principals who demonstrate their effectiveness by improving student achievement (as defined in this notice) as part of the coherent and integrated approach of the local educational agency (LEA) to strengthening the educator workforce. <u>RTT selection criterion (D)(2)</u> The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (ii) Design and implement rigorous, transparent, and fair evaluation systems for teachers and principals that (a) differentiate effectiveness using multiple rating categories that take into account data on student growth as a significant factor, and (b) are designed and developed with teacher and principal involvement; (iv) Use these evaluations, at a minimum, to inform decisions regarding—

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		(b) Compensating, promoting, and retaining teachers and principals, including by providing opportunities for highly effective teachers and principals (both as defined in this notice) to obtain additional compensation and be given additional responsibilities; Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2) : Required district activities under the SIG transformation model (i) Required activities. The LEA must— (C) Identify and reward school leaders, teachers and other staff who, in implementing this model, have increased student achievement and high school graduation rates and identify and remove those who, after ample opportunities have been provided for them to improve their professional development, have not done so; (also a permissible activity under the Turnaround model) (Note: schools implementing the transformation model would be required to identify and reward teachers who increased student achievement)
Teacher tenure, dismissal, or reassignment decisions used student achievement gains	Reported that it used at least one of the following in educator tenure, assignment and retention decisions: • Use gains or growth in achievement of teachers' students in deciding teacher for tenure or dismissal • Use gains or growth in achievement of teachers' students in deciding non-retention with the district • Use gains or growth in achievement of teachers' students in deciding retention in the school or reassignment to another school ***Source:*** *2011 School Survey, item 8*	RTT Selection Criterion (D)(2)(iv)(c) and (d) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to ensure that participating LEAs— (iv) use these evaluations, at a minimum, to inform decisions regarding (c) whether to grant tenure and/or full certification (where applicable) to teachers and principals using rigorous standards and streamlined, transparent, and fair procedures; and (d) removing ineffective tenured and untenured teachers and principals after they have had ample

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		opportunities to improve, and ensuring that such decisions are made using rigorous standards and streamlined, transparent, and fair procedures. SFSF Descriptors (a)(1) The systems used to evaluate the performance of teachers and the use of results from those systems in decisions regarding teacher development, compensation, promotion, retention, and removal. Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010, Absolute Priority 1--Innovations That Support Effective Teachers and Principals Under this priority, the Department provides funding to support practices, strategies, or programs that are designed to increase the number or percentages of teachers or principals who are highly effective teachers or principals or reduce the number or percentages of teachers or principals who are ineffective, especially for teachers of high-need students, by identifying … highly effective teachers or principals (or removing ineffective teachers or principals). In such initiatives, teacher or principal effectiveness should be determined through an evaluation system that is rigorous, transparent, and fair; performance should be differentiated using multiple rating categories of effectiveness; multiple measures of effectiveness should be taken into account, with data on student growth as a significant factor.

(continued)

Table B-3. Educator workforce development indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		Final requirements for School Improvement Grants (2010 Notice) and Interventions under RTT Selection Criterion (E)(2): Required district activities under the SIG transformation model –see above (school requirements are not specified, but schools using a transformation model would be subject to district requirements).

[1] For indicators where the source is 2011 SEA survey, the text listed in the components column is the actual survey item wording.

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level

Indicator	Components[1]	Recovery Act program requirements
SEA level		
State allowed for expansion of the number of charter schools	Reported one or more of the following: • A state has no cap on the number of charter schools • A state passed legislation to increase the permissible number of charter schools • A state removed the prohibitions on charter schools ***Source:*** *National Alliance for Public Charter Schools annual reports (2010)*	RTT selection criterion (F)(2) The extent to which— (i) The State has a charter school law that does not prohibit or effectively inhibit increasing the number of high-performing charter schools in the State, measured by the percentage of total schools in the State that are allowed to be charter schools or otherwise restrict student enrollment in charter schools; SFSF indicator (d)(7) The number of charter schools that are currently permitted to operate under State law. SFSF indicator (d)(8) The number of charter schools currently operating.
SEA provided guidance on choosing and implementing school intervention models defined by ED	Reported providing technical assistance and guidance on choosing and implementing the four school intervention models defined by ED. ***Source:*** *2011 SEA survey, item 25*	RTT selection criterion (E)(2) The extent to which the State has a high-quality plan and ambitious yet achievable annual targets to— (ii) Support its LEAs in turning around these schools by implementing one of the four school intervention models: turnaround model, restart model, school closure, or transformation model (provided that an LEA with more than nine persistently lowest-achieving schools may not use the transformation model for more than 50 percent of its schools). School Improvement Grants, SEA award priorities I.A.2(a), 2(b), 2(c), 2(d) *Strongest Commitment.* An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: Transformation model

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		a) Turnaround model b) Restart model c) School closure
SEA supported using compensation incentives to improve staffing at low-performing schools	Reported at least one of the following components in state-developed system, standards, guidelines, or technical assistance for differentiated compensation systems: • Higher starting salaries, add-ons, stipends, or signing bonuses for teachers who move to low-performing schools • Loan forgiveness or tuition support for teachers who move to low-performing schools • bonuses or stipends for principals remaining in or transferring to hard-to-staff or low-performing schools ***Source:*** *2011 SEA survey, item 20 and 22*	<u>RTT selection criterion (D)(3)</u> The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to— (i) Ensure the equitable distribution of teachers and principals by developing a plan, informed by reviews of prior actions and data, to ensure that students in high-poverty and/or high-minority schools have equitable access to highly effective teachers and principals and are not served by ineffective teachers and principals at higher rates than other students; and (ii) Increase the number and percentage of effective teachers teaching hard-to-staff subjects and specialty areas including mathematics, science, and special education; teaching in language instruction educational programs (as defined under Title III of the ESEA); and teaching in other areas as identified by the State or LEA. Plans for (i) and (ii) may include, but are not limited to, the implementation of incentives and strategies in such areas as recruitment, compensation, teaching and learning environments, professional development, and human resources practices and processes.
SEA monitored deployment of effective educators in low-performing schools	Reported using data from local educator evaluation systems to monitor the deployment of effective educators in low-performing schools ***Source:*** *2011 SEA survey, item 25*	<u>RTT selection criterion (D)(3)</u> The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to— (i) Ensure the equitable distribution of teachers and principals by developing a plan, informed by reviews of prior actions and data, to ensure that students in high-poverty and/or high-minority schools have equitable access to highly effective teachers and

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		principals and are not served by ineffective teachers and principals at higher rates than other students.
District level		
District targeted low-performing schools for closure[2]	Reported using the following strategy to support school restructuring: • Targeting individual chronically low-performing school for closure ***Source:*** *2011 District survey, item 9*	School Improvement Grants, SEA award priorities I.A.2(c) Strongest Commitment. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (c) SIG School Closure model School closure occurs when an LEA closes a school and enrolls the students who attended that school in other schools in the LEA that are higher achieving. These other schools should be within reasonable proximity to the closed school and may include, but need not be limited to, charter schools or new schools for which achievement data are not yet available.
District replaced principal and teachers in low-performing schools[2]	Reported using both of the following strategies to support school restructuring: • Replacing a substantial proportion of the teachers in individual low-performing schools • Replacing principals in individual low- performing schools ***Source:*** *2011 District survey, item 9*	School Improvement Grants, SEA award priorities I.A.2(a) Strongest Commitment. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) SIG Turnaround model (1) A turnaround model is one in which an LEA must-- (i) Replace the principal and grant the new principal sufficient operational flexibility (including flexibility in staffing, scheduling, and budgeting) to implement a comprehensive approach in order to substantially improve student achievement outcomes and increase high school graduation rates;

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		(ii) Use locally adopted competencies to measure the effectiveness of staff who can work within the turnaround environment to meet the needs of students, (A) Screen all existing staff and rehire no more than 50 percent; and (B) Select new staff;
District contracted with external organization to operate low-performing schools[2]	Reported using the following strategy to support school restructuring: • Contracting with CMOs, EMOs, or community organizations to operate schools, and targeting the strategy to low-performing schools ***Source:*** *2011 District survey, item 9*	School Improvement Grants, SEA award priorities I.A.2(b) Strongest Commitment. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (b) SIG Restart model A restart model is one in which an LEA converts a school or closes and reopens a school under a charter school operator, a charter management organization (CMO), or an education management organization (EMO) that has been selected through a rigorous review process. (A CMO is a non-profit organization that operates or manages charter schools by centralizing or sharing certain functions and resources among schools. An EMO is a for-profit or non-profit organization that provides ''whole-school operation'' services to an LEA.) A restart model must enroll, within the grades it serves, any former student who wishes to attend the school.
District provided compensation incentives to improve staffing at low-performing schools[2]	Reported that its educator compensation system included at least one of the following: • Higher starting salaries, add-ons, stipends, or signing bonuses for teachers who move to low-performing schools • Loan forgiveness or tuition support for teachers who move to low-performing schools ***Source:*** *2011 District survey, item 6*	RTT selection criterion (D)(3) The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to— (i) Ensure the equitable distribution of teachers and principals by developing a plan, informed by reviews of prior actions and data, to ensure that students in high-poverty and/or high-minority schools have equitable access to highly effective teachers and principals and are not served by ineffective

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		teachers and principals at higher rates than other students; and (ii) Increase the number and percentage of effective teachers teaching hard-to-staff subjects and specialty areas including mathematics, science, and special education; teaching in language instruction educational programs (as defined under Title III of the ESEA); and teaching in other areas as identified by the State or LEA. Plans for (i) and (ii) may include, but are not limited to, the implementation of incentives and strategies in such areas as recruitment, compensation, teaching and learning environments, professional development, and human resources practices and processes. School Improvement Grants, SEA award priorities I.A.2(a) and (d) Strongest Commitment. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) SIG Turnaround model (1) A turnaround model is one in which an LEA must-- (iii) Implement such strategies as financial incentives, increased opportunities for promotion and career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in the turnaround school; (d) SIG Transformation model (1)(i)Required activities. The LEA must— (E) Implement such strategies as financial incentives, increased opportunities for promotion or career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in a transformation school.

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		(1)(ii) Permissible activities. An LEA may also implement other strategies to develop teachers' and school leaders' effectiveness, such as-- (A) Providing additional compensation to attract and retain staff with the skills necessary to meet the needs of the students in a transformation school;
District extended school day, week, or year in low-performing schools[2]	Reported using at least one of the following strategies to support school restructuring: • Extending the regular school day and/or week, including "Saturday" school or before/after school sessions (required for some students), and targeting the strategy to low-performing schools • Extending the regular school year, and targeting the strategy to low-performing schools ***Source:*** *2011 District survey, item 9*	School Improvement Grants, SEA award priorities I.A.2(a) and (d) Strongest Commitment. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) SIG Turnaround model (1) A turnaround model is one in which an LEA must-- (viii) Establish schedules and implement strategies that provide increased learning time (as defined in this notice)*; (d) SIG Transformation model (3)(i) Required activities. The LEA must- (A) Establish schedules and strategies that provide increased learning time (as defined in this notice)*; (ii) Permissible activities. An LEA may also implement other activities that extend learning time and create community oriented schools, such as— (B) Extending or restructuring the school day so as to add time for such strategies as advisory periods that build relationships between students, faculty, and other school staff; *Increased learning time means using a longer school day, week, or year schedule to significantly increase the total number of school hours…

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
District required low-performing schools to partner with organizations that specialize in instructional improvement[2]	Reported using the following strategy to help individual schools improve instruction and related support activities: • Requiring schools to partner with an organization that specializes in instructional improvement (e.g., local universities or outside vendors) and targeted the strategy to low-performing schools ***Source:*** *2011 District survey, item 10*	School Improvement Grants, SEA award priorities I.A.2(d) Strongest Commitment. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (d) SIG Transformation model (4)(i) Required activities. The LEA must- (B) Ensure that the school receives ongoing, intensive technical assistance and related support from the LEA, the SEA, or a designated external lead partner organization (such as a school turnaround organization or an EMO).
District implemented programs in low-performing schools to encourage family and community involvement[2]	Reported using the following strategy to help individual schools improve instruction and related support activities: • Implementing school-level programs to encourage family and community involvement, and targeting the strategy to low-performing schools ***Source:*** *2011 District survey, item 10*	School Improvement Grants, SEA award priorities I.A.2(d) Strongest Commitment. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (d) SIG Transformation model (3)(i) Required activities. The LEA must- (B) Provide ongoing mechanisms for family and community engagement; (ii) Permissible activities. An LEA may also implement other strategies that extend learning time and create community-oriented schools, such as— (A) Partnering with parents and parent organizations, faith- and community-based organizations, health clinics, other State or local agencies, and others to create safe school environments that meet students' social, emotional, and health needs;

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
District provided school leaders in low-performing schools with staffing or budgeting flexibility to implement school reform[2]	Reported using the following strategy to support school restructuring: • Allowing school leaders to deviate from standard district staffing or budgeting patterns to implement school-specific reforms, and targeting the strategy to low-performing schools ***Source:*** *2011 District survey, item 9*	School Improvement Grants, SEA award priorities I.A.2(a) and (d) *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must— (i) Replace the principal and grant the principal sufficient operational flexibility (including in staffing, calendars/time, and budgeting) to implement fully a comprehensive approach in order to substantially improve student achievement outcomes and increase high school graduation rates. (d) *SIG Transformation model* (1)(ii) Permissible activities. An LEA may also implement other strategies to develop teachers' and school leaders' effectiveness, such as— (C) Ensuring that the school is not required to accept a teacher without the mutual consent of the teacher and principal, regardless of the teacher's seniority. (4)(i) Required activities. The LEA must— (A) Give the school sufficient operational flexibility (such as staffing, calendars, and budgeting) to implement fully a comprehensive approach to substantially improve student achievement outcomes and increase high school graduation rates;
District provided technical assistance to low-performing schools to screen or select school improvement experts or models[2]	Reported using at least one of the following strategies to support school restructuring: • Providing technical assistance to help schools Identify and screen potential school improvement models, and targeted the strategy to low-performing schools	School Improvement Grants, SEA award priorities I.A.2(a) and (d) *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve:

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	• Providing technical assistance to help schools screen and select school improvement experts for low-performing schools, and targeted the strategy to low-performing schools ***Source:*** *2011 District survey, item 9*	(a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (iv) Provide staff ongoing, high-quality, job-embedded professional development that is aligned with the school's comprehensive instructional program and designed with school staff to ensure that they are equipped to facilitate effective teaching and learning and have the capacity to successfully implement school reform strategies; (vi) Use data to identify and implement an instructional program that is research-based and vertically aligned from one grade to the next as well as aligned with State academic standards; (d) *SIG Transformation model* (1)(i) Required activities. The LEA must— (D) Provide staff ongoing, high quality, job-embedded professional development (e.g., regarding subject specific pedagogy, instruction that reflects a deeper understanding of the community served by the school, or differentiated instruction) that is aligned with the school's comprehensive instructional program and designed with school staff to ensure they are equipped to facilitate effective teaching and learning and have the capacity to successfully implement school reform strategies; (4)(i)(B) Ensure that the school receives ongoing, intensive technical assistance and related support from the LEA, SEA, or designated external lead partner organization (such as a school turnaround organization or an EMO).
School level		
Staffing or budgeting autonomy increased as part of school restructuring[3]	Reported introducing the following features of school restructuring or reorganization at the school: • Increased autonomy in staffing and budgeting from the district, CMO or EMO, compared to before	<u>School Improvement Grants, SEA award priorities I.A.2(a) and (d)</u> *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively,

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
	restructuring or reorganizing ***Source:*** *2011 School survey, item 10*	one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (i) Replace the principal and grant the principal sufficient operational flexibility (including in staffing, calendars/time, and budgeting) to implement fully a comprehensive approach in order to substantially improve student achievement outcomes and increase high school graduation rates. (d) *SIG Transformation model* (1)(ii) Permissible activities. An LEA may also implement other strategies to develop teachers' and school leaders' effectiveness, such as— (C) Ensuring that the school is not required to accept a teacher without the mutual consent of the teacher and principal, regardless of the teacher's seniority. (4)(i) Required activities. The LEA must— (A) Give the school sufficient operational flexibility (such as staffing, calendars, and budgeting) to implement fully a comprehensive approach to substantially improve student achievement outcomes and increase high school graduation rates;
School day, week, or year extended as part of school restructuring[3]	Reported introducing <u>at least one</u> the following features of school restructuring or reorganization at the school: • Extended regular school day and/or week • Extended regular school year ***Source:*** *2011 School survey, item 10*	<u>School Improvement Grants, SEA award priorities I.A.2(a) and (d)</u> *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (viii) Establish schedules and implement strategies that provide increased learning time (as defined in this notice)*;

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		(d) *SIG Transformation model* (3)(i) Required activities. The LEA must- (A) Establish schedules and strategies that provide increased learning time (as defined in this notice)*; (ii) Permissible activities. An LEA may also implement other activities that extend learning time and create community oriented schools, such as— (B) Extending or restructuring the school day so as to add time for such strategies as advisory periods that build relationships between students, faculty, and other school staff; *Increased learning time means using a longer school day, week, or year schedule to significantly increase the total number of school hours…
School modified daily schedule to increase instructional time for reading/English language arts or mathematics[3]	Reported using the following strategy to help improve instruction and related student services: • Modified their daily schedule to increase the amount of instructional time for reading/English language arts or mathematics. ***Source:*** *2011 School survey, item 11*	<u>School Improvement Grants, SEA award priorities I.A.2(d)</u> *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (viii) Establish schedules and implement strategies that provide increased learning time (as defined in this notice)*; (d) *SIG Transformation model* (3)(i) Required activities. The LEA must- (A) Establish schedules and strategies that provide increased learning time (as defined in this notice)*; (ii) Permissible activities. An LEA may also implement other activities that extend learning time and create community oriented schools, such as—

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		(B) Extending or restructuring the school day so as to add time for such strategies as advisory periods that build relationships between students, faculty, and other school staff; *Increased learning time means using a longer school day, week, or year schedule to significantly increase the total number of school hours…
Compensation incentives to encourage teachers to move to or remain in the school[3]	Reported that its compensation practices included: • Higher starting salaries, add-ons, stipends, or bonuses for teachers who move to teach in the school ***Source:*** *2011 School survey, item 7*	<u>RTT selection criterion (D)(3)</u> The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to— (i) Ensure the equitable distribution of teachers and principals by developing a plan, informed by reviews of prior actions and data, to ensure that students in high-poverty and/or high-minority schools have equitable access to highly effective teachers and principals and are not served by ineffective teachers and principals at higher rates than other students; and (ii) Increase the number and percentage of effective teachers teaching hard-to-staff subjects and specialty areas including mathematics, science, and special education; teaching in language instruction educational programs (as defined under Title III of the ESEA); and teaching in other areas as identified by the State or LEA. Plans for (i) and (ii) may include, but are not limited to, the implementation of incentives and strategies in such areas as recruitment, compensation, teaching and learning environments, professional development, and human resources practices and processes. <u>School Improvement Grants, SEA award priorities I.A.2(a) and (d)</u> *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the

(continued)

Table B-4. SEA, district, and school indicators, components, and Recovery Act program requirements for supporting improvement for low-performing schools (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (iii) Implement such strategies as financial incentives, increased opportunities for promotion and career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in the turnaround school; (d) *SIG Transformation model* (1)(i)Required activities. The LEA must— (E) Implement such strategies as financial incentives, increased opportunities for promotion or career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in a transformation school. (1)(ii) Permissible activities. An LEA may also implement other strategies to develop teachers' and school leaders' effectiveness, such as-- (A) Providing additional compensation to attract and retain staff with the skills necessary to meet the needs of the students in a transformation school;
Nonfinancial incentives to encourage teachers to move to or remain in the school[3]	Reported that its compensation practices included: • Non-financial incentives (e.g., smaller class size, planning time, reduced classroom hours) to encourage teachers to come to and remain in the school. ***Source:*** *2011 School survey, item 7*	<u>School Improvement Grants, SEA award priorities I.A.2(a)</u> *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (iii) Implement such strategies as financial

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		incentives, increased opportunities for promotion and career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in the turnaround school;
Substantial portion of teachers replaced as part of school restructuring[3]	Reported that it introduced the following feature of school restructuring or reorganization at the school: • Replacement of a substantial proportion of teachers introduced as a feature of school restructuring or reorganization. ***Source:*** *2011 School survey, item 10*	<u>School Improvement Grants, SEA award priorities I.A.2(a)</u> *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (ii) Use locally adopted competencies to measure the effectiveness of staff who can work within the turnaround environment to meet the needs of students, (A) Screen all existing staff and rehire no more than 50 percent; and (B) Select new staff;
Effective teachers reassigned to school as part of school restructuring[3]	Features of school restructuring or reorganization introduced at the school included: • Reassignment of effective teachers to the school from others ***Source****: 2011 School survey, item 10*	<u>RTT selection criterion (D)(3)</u> The extent to which the State, in collaboration with its participating LEAs, has a high-quality plan and ambitious yet achievable annual targets to— (i) Ensure the equitable distribution of teachers and principals by developing a plan, informed by reviews of prior actions and data, to ensure that students in high-poverty and/or high-minority schools have equitable access to highly effective teachers and principals and are not served by ineffective teachers and principals at higher rates than other students; and (ii) Increase the number and percentage of effective teachers teaching hard-to-staff subjects and specialty areas including mathematics, science, and special education; teaching in language instruction educational programs (as defined under Title III of the

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		ESEA); and teaching in other areas as identified by the State or LEA. Plans for (i) and (ii) may include, but are not limited to, the implementation of incentives and strategies in such areas as recruitment, compensation, teaching and learning environments, professional development, and human resources practices and processes. <u>School Improvement Grants, SEA award priorities I.A.2(a)</u> *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (a) *SIG Turnaround model* (1) A turnaround model is one in which an LEA must-- (iii) Implement such strategies as financial incentives, increased opportunities for promotion and career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in the turnaround school; <u>School Improvement Grants, SEA award priorities I.A.2(d)</u> <u>SIG Transformation model</u> (1)(i)Required activities. The LEA must— (E) Implement such strategies as financial incentives, increased opportunities for promotion or career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in a transformation school. (1)(ii) Permissible activities. An LEA may also implement other strategies to develop teachers' and school leaders' effectiveness, such as--

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
		A) Providing additional compensation to attract and retain staff with the skills necessary to meet the needs of the students in a transformation school;
School implemented programs to encourage family and community involvement[3]	Reported that it used the following strategy to help improve instruction and related student services: • Implemented programs to encourage family and community involvement ***Source:*** *2011 School survey, item 11*	School Improvement Grants, SEA award priorities I.A.2(d) *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (d) *SIG Transformation model* (3)(i) Required activities. The LEA must- (B) Provide ongoing mechanisms for family and community engagement;
School implemented programs to orient parents to school improvement models[3]	Reported that it used the following strategy to help improve instruction and related student services: • Implemented programs to orient parents to school improvement models ***Source:*** *2011 School survey, item 11*	School Improvement Grants, SEA award priorities I.A.2(d) *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (d) *SIG Transformation model* (3)(i) Required activities. The LEA must- (B) Provide ongoing mechanisms for family and community engagement;
School implemented programs to address students' social and emotional needs[3]	Reported that it used the following strategy to help improve instruction and related student services: • Implemented programs to address students' social and emotional needs ***Source:*** *2011 School survey, item 11*	School Improvement Grants, SEA award priorities I.A.2(d) SIG Transformation model (3)(ii) Permissible activities. An LEA may also implement other strategies that extend learning time and create community-oriented schools, such as— (A)Partnering with parents and parent organizations, faith- and community-based organizations, health clinics, other State or local agencies, and others to create safe school environments that meet students' social, emotional, and health needs;

(continued)

Table B-4. Support for low-performing schools indicators, components, and Recovery Act program requirements, by education level (cont'd)

Indicator	Components[1]	Recovery Act program requirements
School used outside school improvement experts as part of school restructuring or to improve instruction[3]	Reported that it introduced the following feature of school restructuring or reorganization introduced at the school included: • Used school improvement experts from outside the school introduced as part of school restructuring or reorganizing or Reported using the following strategy to help improve instruction and related student services: • Used a school improvement model developed by and outside partner or vendor to improve instruction and related services ***Source:*** *2011 School survey, items 10 and 11*	School Improvement Grants, SEA award priorities I.A.2(d) *Strongest Commitment*. An LEA with the strongest commitment is an LEA that agrees to implement, and demonstrates the capacity to implement fully and effectively, one of the following rigorous interventions in each Tier I and Tier II school that the LEA commits to serve: (d) *SIG Transformation model* (4)(i) Required activities. The LEA must- (B) Ensure that the school receives ongoing, intensive technical assistance and related support from the LEA, the SEA or a designated external lead partner organization (such as a school turnaround organization or an EMO). (ii) Permissible activities The LEA may also implement other strategies for providing operational flexibility and intensive support, such as— (A) Allowing the school to be run under a new governance arrangement, such as a turnaround division within the LEA or SEA;

[1] For indicators where the source is 2011 SEA survey, the text listed in the components column is the actual survey item wording.
[2] Indicator limited to districts with low-performing schools.
[3] Indicator limited to low-performing schools.

Sources for Recovery Act program requirements:

U.S. Department of Education. (2010). Overview Information; Race to the Top Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. *Federal Register*, *75*(71). Available from http://www.gpo.gov/fdsys/pkg/FR-2009-11-18/pdf/E9-27427.pdf

U.S. Department of Education. (2009, November). State Fiscal Stabilization Fund Program; Final Rule. *Federal Register*, 74(217): 58436-58525. Available from http://www2.ed.gov/legislation/FedRegister/finrule/2009-4/111209a.pdf

U.S. Department of Education, Office of Innovation and Improvement. (2010). Overview Information: Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. *Federal Register, 75*(48): 12072-12086. Available from http://www2.ed.gov/legislation/FedRegister/announcements/2010-1/031210d.html

U.S. Department of Education. (2010). School Improvement Grants; American Recovery and Reinvestment Act of 2009 (ARRA); Title I of the Elementary and Secondary Education Act of 1965, as Amended (ESEA). *Federal Register, 75*(208): 66363-66371. Available from http://www.gpo.gov/fdsys/pkg/FR-2010-10-28/pdf/2010-27313.pdf

U.S. Department of Education. (2010). *Application for the Teacher Incentive Fund*. CFDA Number: 84.385. Available from http://*www2.ed.gov/programs/teacherincentive/appfinal5192010.doc*

U.S. Department of Education, Institute for Education Sciences. (2009). Request for Applications; Grants for Statewide Longitudinal Data Systems Under the American Recovery and Reinvestment Act of 2009. CFDA Number: 84.384. Available from http://nces.ed.gov/programs/slds/pdf/2009_ARRA_RFA.pdf

U.S. Department of Education. (2010). School Improvement Grants; American Recovery and Reinvestment Act of2009 (ARRA); Title I of the Elementary and Secondary Education Act of 1965, as Amended (ESEA). *Federal Register, 75*(208): 66363-66371. Available from http://www.gpo.gov/fdsys/pkg/FR-2010-10-28/pdf/2010-27313.pdf

U.S. Department of Education, Office of Innovation and Improvement. (2010). Overview Information: Investing in Innovation Fund; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2010. *Federal Register, 75*(48): 12072-12086. Available from http://www2.ed.gov/legislation/FedRegister/announcements/2010-1/031210d.html

Appendix C
Detailed Tables for Standards and Assessments Chapter

This page intentionally blank.

Table C-1. Confidence intervals for percentage of districts in Common Core states that implemented reforms related to new or revised state standards: 2010-11 and 2011-12

Indicator description	2010-11 %	2010-11 Low CI	2010-11 High CI	2011-12 %	2011-12 Low CI	2011-12 High CI
District Aware of State Adoption of Common Core State Standards	86	79.0	93.8	**98**§	96.7	99.0
District Provided Professional Development on New or Revised Standards on Instructional Strategies for Educators Who Teach or Mentor Math or English Language Arts	59	51.0	66.2	**73**§	67.2	79.5
District Provided Professional Development on New or Revised Standards on Instructional Strategies for Teachers to Help ELL or Students with Disabilities Master the Standards	58	50.3	65.7	58	51.1	65.0
District Distributed Instructional Materials or Provided Selection Guidance on Curricula Aligned with the New or Revised State Content Standards	53	45.8	59.9	**63**§	55.5	70.4

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < 0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of districts in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, for each year, the denominator is the estimated number of districts in CCSS states as of that year. No data are reported for 2009-10 because the Common Core State Standards were not yet available.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Table C-2. Results of significance tests comparing percentages of districts in Common Core states that implemented reforms related to new or revised state standards: 2011-12

Ref #	Indicator description	Percent of districts[1]
1	District Aware of State Adoption of Common Core State Standards	98
2	District Provided Professional Development on New or Revised State Content Standards for Educators Who Teach or Mentor Mathematics or Reading/English Language Arts	73
3	District Provided Professional Development on New or Revised State Content Standards on Instructional Strategies for Teachers to Help English Learners or Students with Disabilities Master the Content Standards	58
4	District Distributed Instructional Materials or Provided Selection Guidance on Curricula Aligned with the New or Revised State Content Standards	63

[1] These percentages show the percentage of districts in CCSS states that satisfied the requirements of the indicator. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of these estimates.

Ref #	1	2	3	4
1		*	*	*
2			*	*
3				
4				

*Percentages are significantly different ($p < 0.05$).

Table reads: A significantly larger percentage of districts were aware of their state's adoption of Common Core State Standards (98 percent) than provided professional development on new or revised state content standards for educators who teach or mentor mathematics or reading/English language arts (73 percent). Use the reference number (Ref #) to identify the indicator.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table C-3. Confidence intervals for percentage of high-poverty and other districts in Common Core states that implemented reforms related to new or revised state content standards: 2011-12

	High Poverty			Other		
Indicator description	**%**	**Low CI**	**High CI**	**%**	**Low CI**	**High CI**
District Aware of State Adoption of Common Core State Standards	94	90.3	97.7	99*	98.6	99.9
District Provided Professional Development on New or Revised State Content Standards on Instructional Strategies for Educators Who Teach or Mentor Mathematics or Reading/English Language Arts	64	52.5	74.8	77	69.8	84.1
District Provided Professional Development on New or Revised State Content Standards on Instructional Strategies for Teachers to Help English Learners or Students with Disabilities Master the Content Standards	55	45.5	64.2	59	50.3	68.1
District Distributed Instructional Materials or Provided Selection Guidance on Curricula Aligned with the New or Revised State Content Standards	59	48.6	69.9	64	55.1	73.5

*Percentage is significantly different from percentage for high-poverty districts ($p < 0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of districts in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, the denominator for the high-poverty percentages is the estimated number of high-poverty districts (had a child poverty rate above 21.66 percent) that were in states that adopted the Common Core as of the 2011-12 school year and have sufficient data. The denominator for the other percentages is the estimated number of districts with sufficient data that had that had a child poverty rate at or below 21.66 percent that are in states that adopted the Common Core in at least one subject as of that year.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) program, district data for 2008 (USSD08.xls) for poverty data. Retrieved November 11, 2010, from http://www.census.gov/did/www/saipe/data/schools/index.html.

Table C-4. Confidence intervals for percentage of large districts and districts of other sizes in Common Core states that implemented reforms related to new or revised state content standards: 2011-12

	Large			Medium			Small		
Indicator description	%	Low CI	High CI	%	Low CI	High CI	%	Low CI	High CI
District Aware of State Adoption of Common Core State Standards	100	100.0	100.0	98*	97.2	99.6	98*	96.6	99.0
District Provided Professional Development on New or Revised State Content Standards on Instructional Strategies for Educators Who Teach or Mentor Mathematics or Reading/English Language Arts	91	90.5	90.5	75*	70.2	80.1	73*	66.8	79.6
District Provided Professional Development on New or Revised State Content Standards on Instructional Strategies for Teachers to Help English Learners or Students with Disabilities Master the Content Standards	74	74.4	74.4	61*	54.6	66.7	58*	50.6	65.1
District Distributed Instructional Materials or Provided Selection Guidance on Curricula Aligned with the New or Revised State Content Standards	73	72.6	72.6	57*	50.6	62.6	63*	55.4	70.8

* Percentage is significantly different from percentage for large districts ($p<0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of districts in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, the denominator for a size group is the estimated number of districts of a given size that have sufficient data and are in states that adopted the Common Core in at least one subject as of the 2011-12 school year. District size is based on the student enrollment in schools in the district. Large districts have at least 50,000 students. Medium districts have less than 50,000 but at least 15,000 students. Small districts have fewer than 15,000 students.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. National Center for Education Statistics, Common Core of Data. Local Education Agency Universe Survey: School Year 2008–09 (ag081a.sas7bdat) for enrollment size. Retrieved August 24, 2010, from http://nces.ed.gov/ccd/pubagency.asp.

Table C-5. Confidence intervals for percentage of districts in Common Core states reporting major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12

	District reported challenge as a major challenge[1]			Districts rated the challenge[2]		
District challenge	Percent	Low CI	High CI	Percent	Low CI	High CI
Insufficient funding to purchase new instructional materials aligned with new standards	60	53.4	67.0	95	92.2	97.4
Current assessments are not aligned with the new standards	57	48.9	65.0	95	93.6	96.8
Insufficient funding to support instructional specialists or coaches to help educators implement new standards	52	45.4	57.8	93	90.2	96.0
Lack of district staff capacity or expertise to develop new curricula guides and instructional materials aligned with new standards	37	29.4	44.6	96	94.7	97.7
Inadequate quality or availability of state-developed instructional materials aligned with standards	36	26.4	46.5	94	91.7	95.4
Insufficient funding to provide adequate training to teachers on the content and use of the standards	36	29.2	43.0	96	94.1	97.4
Standardized assessments not available for enough subjects or grades	25	18.0	32.3	96	94.4	97.6
Lack of district staff capacity or expertise to provide guidance about or train educators on using new standards for their instruction	25	19.4	30.9	96	94.8	97.8
Concerns or opposition from school staff about additional assessments	22	13.7	30.5	94	88.1	100.0
Lack of clear SEA guidance or support on expectations concerning when and how standards should be implemented	21	13.8	27.9	94	91.2	96.0
Lack of clear SEA guidance or support on specific content of new standards	19	10.2	27.8	93	90.6	95.5
Lack of district staff capacity or expertise to provide guidance about or train educators on how to administer assessments	12	9.3	15.7	98	97.1	99.3
Concerns or opposition from school staff or staff unions to new standards	11	7.7	14.7	87	81.4	93.5
Concerns or opposition from parents or other community groups to additional assessments	8	4.1	12.4	91	84.7	97.3
Concerns or opposition from parents or other community groups to new standards	7	3.7	10.1	88	82.3	94.6

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Districts rating the challenge excludes districts that identified the challenge as not applicable, districts that did not respond to the question, and districts in states that did not adopt the CCSS in both reading/English language arts and mathematics.

Notes: The percentages in the table are cross-sectional estimates for the population of districts in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table C-6. Results of significance tests comparing percentages of districts in Common Core states reporting major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12

Ref. #	Challenge description	Percent[1]
1	Insufficient funding to purchase new instructional materials aligned with new standards	60
2	Current assessments are not aligned with the new standards	57
3	Insufficient funding to support instructional specialists or coaches to help educators implement new standards	52
4	Lack of district staff capacity or expertise to develop new curricula guides and instructional materials aligned with new standards	37
5	Inadequate quality or availability of state-developed instructional materials aligned with standards	36
6	Insufficient funding to provide adequate training to teachers on the content and use of the standards	36
7	Standardized assessments not available for enough subjects or grades	25
8	Lack of district staff capacity or expertise to provide guidance about or train educators on using new standards for their instruction	25
9	Concerns or opposition from school staff about additional assessments	22
10	Lack of clear SEA guidance or support on expectations concerning when and how standards should be implemented	21
11	Lack of clear SEA guidance or support on specific content of new standards	19
12	Lack of district staff capacity or expertise to provide guidance about or train educators on how to administer assessments	12
13	Concerns or opposition from school staff or staff unions to new standards	11
14	Concerns or opposition from parents or other community groups to additional assessments	8
15	Concerns or opposition from parents or other community groups to new standards	7

[1] The percentage of districts in CCSS states that rated the challenge as major. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates

(continued)

Table C-6. Results of significance tests comparing percentages of districts in Common Core states reporting major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12 (cont'd)

Ref. #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1			*	*	*	*	*	*	*	*	*	*	*	*	*
2				*	*	*	*	*	*	*	*	*	*	*	*
3				*	*	*	*	*	*	*	*	*	*	*	*
4							*	*	*	*	*	*	*	*	*
5								*	*	*	*	*	*	*	*
6							*	*	*	*	*	*	*	*	*
7												*	*	*	*
8												*	*	*	*
9												*	*	*	*
10												*	*	*	*
11														*	*
12														*	*
13															*
14															
15															

*Percentages are significantly different ($p < 0.05$)

Table reads: As denoted by no asterisk in row 1, column 2, the percentage of districts that rated insufficient funding to purchase new instructional materials as a major challenge (60 percent) and the percentage that rated current assessments are not aligned with the new standards as a major challenge (57 percent) were not significantly different. Use the reference number (Ref. #) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table C-7. Confidence intervals for percentage of schools in Common Core states that implemented new or revised state standards: 2010-11 and 2011-12

Indicator description	2010-11 %	2010-11 Low CI	2010-11 High CI	2011-12 %	2011-12 Low CI	2011-12 High CI
Teachers Received Professional Development on New or Revised State Content Standards	63	60.4	65.9	**78**§	75.3	80.5
Teachers Received Professional Development Targeted to Help English Learners or Students with Disabilities Master New or Revised State Content Standards	62	58.5	64.5	**68**§	63.6	71.8
School Used Curriculum or Curriculum Materials Aligned with New or Revised State Content Standards	60	56.8	62.4	**66**§	62.7	69.2

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < 0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of schools in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, for each year, the denominator is the estimated number of schools in the states that adopted the Common Core in at least one subject as of that year. No data are reported for 2009-10 because the Common Core State Standards were not yet available.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Table C-8. Results of significance tests comparing percentages of schools in Common Core states that implemented new or revised state standards: 2011-12

Ref #	Indicator description	Percent of schools[1]
1	Teachers Received Professional Development on New or Revised State Content Standards	78
2	Teachers Received Professional Development Targeted to Help English Learners or Students with Disabilities Master New or Revised State Content Standards	68
3	School Used Curriculum or Curriculum Materials Aligned with New or Revised State Content Standards	66

[1] These percentages show the percentage of schools in CCSS states that satisfied the requirements of the indicator. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Ref #	1	2	3
1		*	*
2			
3			

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of schools in CCSS states reported that teachers received professional development on new or revised state content standards (78 percent) than received professional development targeted to help English learners or students with disabilities master new or revised state content standards (68 percent). Use the reference number (Ref #) to identify the indicator.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table C-9. Confidence intervals for percentage of low-performing and other schools in Common Core states that implemented new or revised state standards: 2011-12

Indicator description	Low-performing schools %	Low-performing schools Low CI	Low-performing schools High CI	Other schools %	Other schools Low CI	Other schools High CI
Teachers Received Professional Development on New or Revised State Content Standards	73	67.3	78.5	79*	76.1	81.7
Teachers Received Professional Development Targeted to Help English Learners or Students with Disabilities Master New or Revised State Content Standards	68	63.5	73.4	68	62.7	72.4
School Used Curriculum or Curriculum Materials Aligned with New or Revised State Content Standards	59	52.7	66.3	67*	63.9	70.4

*Percentage is significantly different from percentage for low-performing schools ($p < 0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of schools in CCSS states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, the denominator is the estimated number of schools in the performance status category (low-performing, other) with sufficient data and in states that adopted the Common Core in at least one subject as of the 2011-12 school year. Low-performing schools include schools that were (1) in improvement, corrective action, or restructuring, (2) identified as among the lowest achieving schools, or (3) that have had a graduation rate below 60 percent over a number of years.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Table C-10. Confidence intervals for the percentage of schools in Common Core states reporting major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12

	School reported challenge as a major challenge[1]			School rated the challenge[2]		
School challenge	%	Low CI	High CI	%	Low CI	High CI
Insufficient funding to support instructional specialists or coaches to help teachers implement new standards	43	38.8	47.7	84	81.2	86.7
Insufficient funding to purchase new instructional materials aligned with new standards	42	38.2	46.5	85	83.0	87.9
Current assessments are not aligned with the new standards	30	26.3	34.5	86	83.6	89.1
Inadequate quality or availability of state-developed instructional materials aligned with standards	28	24.5	32.3	86	83.5	88.6
Lack of school staff or expertise to develop new curricula guides and instructional materials aligned with new standards	25	20.9	29.9	87	84.0	89.0
Lack of school staff or expertise to provide guidance about or train educators on using new standards for their instruction	20	16.6	23.0	87	85.0	90.0
Standardized assessments not available for enough subjects or grades	16	12.8	18.8	90	87.5	91.5
Lack of clear district guidance or support on expectations concerning when and how standards should be implemented	12	9.3	14.4	86	81.3	90.9
Concerns or opposition from school staff about additional assessments	11	7.3	15.2	93	90.9	94.6
Lack of clear district guidance or support on specific content of new standards	9	7.3	11.7	86	81.2	91.0
Concerns or opposition from school staff or staff unions about new standards	8	6.5	10.1	85	82.3	87.4
Lack of school staff or expertise to train educators on how to administer assessments	6	4.4	8.2	93	91.7	95.2
Concerns or opposition from parents or other community groups to additional assessments	4	2.4	5.1	90	88.0	92.1
Concerns or opposition from parents or other community groups focused on new standards	4	1.9	5.5	84	81.8	87.1

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge.

[2] Schools rating the challenge excludes schools that identified the challenge as not applicable, schools that did not respond to the question, and schools in states that did not adopt the CCSS in both reading/English language arts and mathematics.

Notes: The percentages in the table are cross-sectional estimates for the population of schools in Common Core states that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table C-11. Results of significance tests comparing percentages of schools in Common Core states that reported major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12

Ref. #	Challenge	Percent[1]
1	Insufficient funding to support instructional specialists or coaches to help teachers implement new standards	43
2	Insufficient funding to purchase new instructional materials aligned with new standards	42
3	Current assessments are not aligned with the new standards	30
4	Inadequate quality or availability of state-developed instructional materials aligned with standards	28
5	Lack of school staff or expertise to develop new curricula guides and instructional materials aligned with new standards	25
6	Lack of school staff or expertise to provide guidance about or train educators on using new standards for their instruction	20
7	Standardized assessments not available for enough subjects or grades	16
8	Lack of clear district guidance or support on expectations concerning when and how standards should be implemented	12
9	Concerns or opposition from school staff about additional assessments	11
10	Lack of clear district guidance or support on specific content of new standards	9
11	Concerns or opposition from school staff or staff unions about new standards	8
12	Lack of school staff or expertise to train educators on how to administer assessments	6
13	Concerns or opposition from parents or other community groups to additional assessments	4
14	Concerns or opposition from parents or other community groups to new standards	4

[1] These are the percentage of schools in CCSS states that rated the challenge as major. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

(continued)

Table C-11. Results of significance tests comparing percentages of schools in Common Core states that reported major challenges when planning or implementing new or revised state standards and aligned assessments: 2011-12 (cont'd)

Ref. #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1			*	*	*	*	*	*	*	*	*	*	*	*
2			*	*	*	*	*	*	*	*	*	*	*	*
3					*	*	*	*	*	*	*	*	*	*
4						*	*	*	*	*	*	*	*	*
5						*	*	*	*	*	*	*	*	*
6								*	*	*	*	*	*	*
7								*		*	*	*	*	*
8										*	*	*	*	*
9												*	*	*
10												*	*	*
11													*	*
12													*	
13														
14														

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of schools rated insufficient funding to support instructional specialists or coaches to help teachers implement new standards as a major challenge (43 percent) than rated insufficient funding to purchase new instructional materials aligned with new standards as a major challenge (42 percent). Use the reference number (Ref. #) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

This page intentionally blank.

Appendix D
Detailed Tables for
Data Systems Chapter

This page intentionally blank.

Table D-1. Confidence intervals for percentage of districts that supported reforms related to educators' use of student data: 2009-10, 2010-11, and 2011-12

Indicator description	2009-10 %	2009-10 Low CI	2009-10 High CI	2010-11 %	2010-11 Low CI	2010-11 High CI	2011-12 %	2011-12 Low CI	2011-12 High CI
District Provided Educators with Access to Assessment Data	91	88.3	94.7	**88**^	83.1	92.4	89	85.5	92.0
District Provided Educators with Professional Development on the Use of Assessment Data for Instructional Planning	83	76.2	90.4	84	80.1	88.4	80	74.4	84.7
District Used Longitudinal Data to Track Student Achievement Gains for Individual Teachers	60	54.7	66.0	56	49.1	62.8	**66**§	59.2	72.4

^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < 0.05$).

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < 0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. For 2010-11 and 2011-12, districts were asked whether they used or included the strategy in all schools, some schools, or if they were not using the strategy whether they were actively planning its use or had no plans to use or include the strategy. For the 2009-10 school year, the response options included only Yes and No.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Table D-2. Results of significance tests comparing percentages of districts that supported reforms related to educators' use of student data: 2011-12

Ref #	Indicator description	Percent of districts[1]
1	District Provided Educators with Access to Assessment Data	89
2	District Provided Educators with Professional Development on the Use of Assessment Data for Instructional Planning	80
3	District Used Longitudinal Data to Track Student Achievement Gains for Individual Teachers	66

[1] These percentages show the percentage of districts that satisfied the requirements of the indicator. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of these estimates.

Ref #	1	2	3
1		*	*
2			*
3			

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of districts provided educators with access to assessment data (89 percent) than provided educators with professional development on the use of assessment data for instructional planning (80 percent). Use the reference number (Ref #) to identify the indicator.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table D-3. Confidence intervals for percentage of high-poverty and other districts that supported reforms related to educators' use of student data: 2011-12

	High Poverty			Other		
Indicator description	**%**	**Low CI**	**High CI**	**%**	**Low CI**	**High CI**
District Provided Educators with Access to Assessment Data	88	82.9	93.0	89	85.3	92.9
District Provided Educators with Professional Development on the Use of Assessment Data for Instructional Planning	80	72.9	87.8	79	72.8	85.8
District Used Longitudinal Data to Track Student Achievement Gains for Individual Teachers	68	57.9	77.9	65	56.6	73.5

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, the denominator for the high poverty percentages is the estimated number of high-poverty districts (had a child poverty rate above 21.66 percent) that have sufficient data. The denominator for the other percentages is the estimated number of districts with sufficient data that had that had a child poverty rate at or below 21.66 percent.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) program, district data for 2008 (USSD08.xls) for poverty data. Retrieved November 11, 2010, from http://www.census.gov/did/www/saipe/data/schools/index.html.

Table D-4. Confidence intervals for percentage of large districts and districts of other sizes that supported reforms related to educators' use of student data: 2011-12

	Large			Medium			Small		
Indicator description	**%**	**Low CI**	**High CI**	**%**	**Low CI**	**High CI**	**%**	**Low CI**	**High CI**
District Provided Educators with Access to Assessment Data	99	98.8	98.8	93*	90.0	96.4	89*	85.1	91.9
District Provided Educators with Professional Development on the Use of Assessment Data for Instructional Planning	94	94.0	94.0	90*	85.8	93.3	79*	73.7	84.5
District Used Longitudinal Data to Track Student Achievement Gains for Individual Teachers	73	72.8	72.8	67*	62.7	70.4	66*	58.8	72.6

* Percentage is significantly different from percentage for large districts ($p<0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, the denominator for a size group is the estimated number of districts of a given size with sufficient data. District size is based on the student enrollment in schools in the district. Large districts have at least 50,000 students. Medium districts have less than 50,000 but at least 15,000 students. Small districts have fewer than 15,000 students.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. National Center for Education Statistics, Common Core of Data. Local Education Agency Universe Survey: School Year 2008–09 (ag081a.sas7bdat) for enrollment size. Retrieved August 24, 2010, from http://nces.ed.gov/ccd/pubagency.asp.

Table D-5. Confidence intervals for percentage of districts that reported major challenges using student assessment data: 2011-12

	District reported challenge as a major challenge[1]			Districts rated the challenge[2]		
District challenge	**Percent**	**Low CI**	**High CI**	**Percent**	**Low CI**	**High CI**
Delays in transmission of assessment results to schools or teachers	35	28.1	41.1	94	87.6	99.7
Insufficient funding to:						
Support data systems that store and provide access to assessment information	33	27.4	39.2	97	93.9	99.1
Train educators in how to administer and use assessments	26	20.0	32.1	96	92.5	99.1
Lack of district staff capacity or expertise to:						
Provide guidance about or train educators on how to use assessments to improve instruction	19	11.2	26.0	97	94.9	99.7
Maintain and facilitate educators' access to assessment data systems	18	13.6	21.5	97	94.1	99.1
Lack of clear SEA guidance or support on using state assessment data systems	14	9.9	18.1	87	80.3	92.7
Restrictions in rules and regulations relating to what can be included in state or district data systems and how to access them	14	8.8	18.6	85	78.4	91.5

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.
[2] Districts rating the challenge excludes districts that identified the challenge as not applicable and districts that did not respond to the question.

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table D-6. Results of significance tests comparing percentages of districts that reported major challenges using student assessment data: 2011-12

Ref. #	Challenge description	Percent[1]
1	Delays in transmission of assessment results to schools or teachers	35
	Insufficient funding to:	
2	Support data systems that store and provide access to assessment information	33
3	Train educators in how to administer and use assessments	26
	Lack of district staff capacity or expertise to:	
4	Provide guidance about or train educators on how to use assessments to improve instruction	19
5	Maintain and facilitate educators' access to assessment data systems	18
6	Lack of clear SEA guidance or support on using state assessment data systems	14
7	Restrictions in rules and regulations relating to what can be included in state or district data systems and how to access them	11

[1] These are the percentage of districts that rated the challenge as major. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates

Ref. #	1	2	3	4	5	6	7
1			*	*	*	*	*
2			*	*	*	*	*
3					*	*	*
4							
5							
6							
7							

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by no asterisk in row 1, column 2, the percentage of districts that rated delays in transmission of assessment results to schools or teachers as a major challenge (35 percent) is not significantly different from the percentage that rated insufficient funding to support data systems that store and provide access to assessment information (33 percent). Use the reference number (Ref. #) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table D-7. Confidence intervals for percentage of schools that used student data to support instruction: 2009-10, 2010-11, and 2011-12

Indicator description	2009-10 %	2009-10 Low CI	2009-10 High CI	2010-11 %	2010-11 Low CI	2010-11 High CI	2011-12 %	2011-12 Low CI	2011-12 High CI
School Used Student Assessment Data to Identify Students for Additional Support	93	90.7	95.2	**98^**	95.0	100.0	**98†**	96.8	98.7
Teachers Had On-Line Access to Student Assessment Results	85	82.8	87.7	**90^**	88.2	92.6	**92†**	89.8	94.4
School Used Student Assessment Data to Tailor Instruction	85	82.3	87.3	**94^**	90.9	96.5	**95†**	93.6	96.1
School Used Longitudinal Data to Track Student Achievement Gains for Individual Teachers	60	57.4	63.1	**68^**	65.7	71.3	**71†**	68.0	74.0

^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < 0.05$).

† Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < 0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. Detailed tables in appendix D provide confidence intervals for each percentage.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Table D-8. Results of significance tests comparing percentages of schools that used student data to support instruction: 2011-12

Ref #	Indicator description	Percent of schools[1]
1	School Used Student Assessment Data to Identify Students for Additional Support	98
2	Teachers Had On-Line Access to Student Assessment Results	92
3	School Used Student Assessment Data to Tailor Instruction	95
4	School Used Longitudinal Data to Track Student Achievement Gains for Individual Teachers	71

[1] These percentages show the percentage of schools that satisfied the requirements of the indicator. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Ref #	1	2	3	4
1		*	*	*
2			*	*
3				*
4				

*Percentages are significantly different ($p < .05$).

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of schools used assessment data to identify students for additional support (98 percent) than reported that their teachers had on-line access to student assessment results (92 percent). Use the reference number (Ref #) to identify the indicator.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table D-9. Confidence intervals for percentage of low-performing and other schools that used student data to support instruction: 2011-12

Indicator description	Low-performing schools			Other schools		
	%	Low CI	High CI	%	Low CI	High CI
School Used Student Assessment Data to Identify Students for Additional Support	99	98.1	100.0	**97***	96.3	98.6
Teachers Had On-Line Access to Student Assessment Results	94	91.4	97.3	92	88.9	94.3
School Used Student Assessment Data to Tailor Instruction	97	94.8	99.1	94	92.9	95.8
School Used Longitudinal Data to Track Student Achievement Gains for Individual Teachers	77	71.6	81.8	**70***	66.2	73.5

* Percentage is significantly different from percentage for low-performing schools ($p<0.05$).

Notes: The percentages in the table are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this table, the denominator is the estimated number of schools in the performance status category (low-performing, other) with sufficient data. Low-performing schools include schools that were in improvement, corrective action, or restructuring, were identified as among the lowest achieving schools, or that have had a graduation rate below 60 percent over a number of years.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Table D-10. Confidence intervals for percentage of schools that reported major challenges using data systems for storing, reporting, and using assessment results: 2011-12

School challenge	School reported challenge as a major challenge[1]			School rated the challenge[2]		
	Percent	Low CI	High CI	Percent	Low CI	High CI
Delays in transmission of assessment results to school or teachers	21	17.8	23.8	93	91.1	94.2
Insufficient funding to purchase or sustain data systems that store and provide access to assessment information	18	15.6	21.3	90	87.7	91.3
Lack of school staff or expertise to:						
Train educators on how to use assessments to improve instruction	11	7.7	15.2	94	92.4	95.4
Maintain and facilitate educators' access to assessment data systems	10	8.0	12.0	94	92.2	95.3
Lack of clear district guidance or support on using state and district assessment data systems	8	6.1	9.3	90	86.1	94.2

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge.
[2] Schools rating the challenge excludes schools that identified the challenge as not applicable and schools that did not respond to the question.

Notes: The percentages in the table are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table D-11. Results of significance tests comparing percentages of schools that reported major challenges using data systems for storing, reporting, and using assessment results: 2011-12

Ref. #	Challenge	Percent[1]
q19i	Delays in transmission of assessment results to school or teachers	21
q19a	Insufficient funding to purchase or sustain data systems that store and provide access to assessment information	18
	Lack of school staff or expertise to:	
q19c	Train educators on how to use assessments to improve instruction	11
q19d	Maintain and facilitate educators' access to assessment data systems	10
q19e	Lack of clear district guidance or support on using state and district assessment data systems	8

[1] These are the percentage of schools that rated the challenge as major. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Ref. #	q19i	q19a	q19c	q19d	q19e
q19i			*	*	*
q19a			*	*	*
q19c					
q19d					*
q19e					

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by no asterisk in row 1, column 2, the percentage of schools that rated delays in transmission of assessment results to schools or teachers as a major challenge (21 percent) was not significantly different from the percentage that rated insufficient funding to purchase or sustain data systems that store and provide access to assessment information as major (18 percent). Use the reference number (Ref. #) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

This page intentionally blank.

Appendix E
Detailed Tables for
Educator Workforce Development Chapter

This page intentionally blank.

Table E-1. Number and percent of SEAs that simplified/shortened educator licensure process or authorized non-university preparation programs, by SEA reform strategy component: 2009-10 to 2011-12

Reform strategy	2009-10		2010-11		2011-12	
	Number	Percent	Number	Percent	Number	Percent
Reported pursuing the following strategy/strategies related to educator licensure and certification:						
Simplifying or shortening the process of obtaining full licensure and/or certification for:						
State-university-based teacher preparation programs	16	3	18	35	19	37
(additional states that reported in 2009-10 only)			*(1)*	*(2)*	*(1)*	*(2)*
(additional states that reported in 2010-11 not 2011-12)					*(7)*	*(14)*
Alternative pathway teacher preparation programs	22	43	26	51	24	47
(additional states that reported in 2009-10 only)			*(1)*	*(2)*	*(1)*	*(2)*
(additional states that reported in 2010-11 not 2011-12)					*(8)*	*(16)*
Authorized independent providers to provide teacher training	16	31	17	33	22	43
(additional states that reported in 2009-10 only)			*(1)*	*(2)*	*(1)*	*(2)*
(additional states that reported in 2010-11 not 2011-12)					*(4)*	*(8)*
Met Indicator (educator licensure and certification reforms)[1]	**33**	**65**	**35**	**69**	**39**	**76**

[1] An SEA met the indicator if it reported pursuing one or more of the three strategies related to teacher licensure and certification.

Notes: Respondents include 50 states and DC.

Numbers in parentheses are SEAs that reported the strategy prior to 2011-12 but not in 2011-12. These counts are included for strategies that may not be expected to occur annually, where 2009-10 or 2010-11 activity could reflect ongoing reform efforts.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 State Education Agencies Survey.

Table E-2. Number and percentage of SEAs that supported use of multi-level ratings, multiple observations, and student achievement gains for teacher evaluation, by SEA method of support and evaluation component: 2011-12

Indicator description	SEAs	
	Number	Percent
Method of SEA support:		
Administering a state-developed teacher evaluation system in which LEA participation is:		
Required	13	25
Optional	16	26
Setting standards and guidelines for LEA-designed systems that are:		
Required	24	47
Optional	10	20
Providing guidance/technical assistance to LEAs on system design and implementation	31	61
Requiring LEAs to submit teacher evaluation design and implementation plans for SEA approval	12	24
Requiring LEAs to report on teacher evaluation system operations and effectiveness	14	27
At least one of the above	42	82
Components of SEA system:		
Use rating scales or rubrics that define three or more performance levels	28	55
Include at least two annual observations of classroom instruction accompanied by written feedback	19	37
Use student achievement gains in NCLB-tested subjects and grades to determine teacher performance ratings	20	39
MET INDICATOR (at least one role and all components)	**14**	**27**

Note: Respondents include 50 states and DC.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 State Education Agencies Survey.

Table E-3. Confidence intervals for percentage of districts that implemented reforms related to educator workforce development: 2009-10, 2010-11, and 2011-12

Indicator description	2009-10 %	2009-10 Low CI	2009-10 High CI	2010-11 %	2010-11 Low CI	2010-11 High CI	2011-12 %	2011-12 Low CI	2011-12 High CI
District Provided School Leaders with Professional Development or Flexibility to Hire Effective Teachers	69	62.5	75.9	64	58.5	70.2	**63†**	56.1	69.8
District Used Student Achievement Gains for Teacher Tenure, Dismissal, or Assignment Decisions	38	33.1	43.6	34	27.2	40.7	**24†§**	19.7	29.0
District Operated a Principal Evaluation System that Included Student Achievement Gains	36	29.7	42.2	30	25.5	34.2	30	24.8	35.9
District Operated a Teacher Evaluation System that Included Multi-level Rubrics, Multiple Observations, and Student Achievement Gains	15	10.9	18.9	20	12.8	27.1	17	13.2	20.0
District Differentiated Teacher Compensation Based On Student Achievement Gains	12	9.9	14.0	16	9.1	22.5	**8†§**	5.5	11.1

†Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < 0.05$).

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < 0.05$).

Notes: The percentages in this table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

For 2010-11 and 2011-12, districts were asked whether they used or included the strategy in all schools, some schools, or if they were not using the strategy whether they were actively planning its use or had no plans to use or include the strategy. For the 2009-10 school year, the response options included only Yes and No.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Surveys.

Table E-4. Results of significance tests comparing percentages of districts that implemented reforms related to educator workforce development: 2011-12

Ref. #	Indicator description	Percent of districts[1]
1	District provided school leaders with professional development or flexibility to hire effective teachers	63
2	District Used Student Achievement Gains for Teacher Tenure, Dismissal, or Assignment Decisions	24
3	District Operated a Principal Evaluation System that Included Student Achievement Gains	30
4	District Operated a Teacher Evaluation System that Included Multi-level Rubrics, Multiple Observations, and Student Achievement Gains	17
5	District Differentiated Teacher Compensation Based On Student Achievement Gains	8

[1] These percentages show the percentage of districts that satisfied the requirements of the indicator. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of these estimates.

Ref. #	1	2	3	4	5
1		*	*	*	*
2			*	*	*
3				*	*
4					*
5					

*Percentages are significantly different (p <.0.05).

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of districts provided school leaders with professional development or flexibility to hire effective teachers (63 percent) than used student achievement gains for teacher tenure, dismissal, or assignment decisions (24 percent). Use the reference number (Ref #) to identify the indicator.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table E-5. Percentage of districts that provided school leaders with professional development or flexibility to hire effective teachers, by reform strategy component: 2009-10, 2010-11 and 2011-12

Reform strategy	Percent		
	2009-10	2010-11	2011-12
Provide PD for principals on identifying, recruiting and hiring effective teachers	55	48	50
Provide school leaders with authority to hire more qualified transfer candidates without regard to seniority	45	48	46
MET INDICATOR (at least one of the above)	**69**	**64**	**63**

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. The denominator for the reform strategy percentages is the number of districts that responded to the question. The denominator for the indicator is the number of districts with sufficient data (i.e., answered enough questions to calculate the indicator).

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 District Survey.

Table E-6. Percentage of districts that operated a teacher evaluation system that included multi-level rubrics, multiple observations, and student achievement gains: 2011-12

Teacher evaluation system components:	Percent
Uses a rating scale or rubric that defines three or more performance levels to evaluate classroom instruction or practice	69
Includes at least two yearly observations of classroom instruction with written feedback	78
Includes student achievement gains in NCLB grades/subjects in determining individual teacher performance ratings	20
MET INDICATOR (teacher evaluation system included all of the components listed)	**17**

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table E-7. Confidence intervals for percentage of high-poverty and other districts that implemented reforms related to educator workforce development: 2011-12

	High Poverty			Other		
Indicator description	**%**	**Low CI**	**High CI**	**%**	**Low CI**	**High CI**
District Provided School Leaders with Professional Development or Flexibility to Hire Effective Teachers	57	49.9	64.4	65	56.4	73.7
District Used Student Achievement Gains for Teacher Tenure, Dismissal, or Assignment Decisions	29	21.2	37.5	22	16.8	28.2
District Operated a Principal Evaluation System that Included Student Achievement Gains	37	30.3	44.0	28	20.6	35.0
District Operated a Teacher Evaluation System that Included Multi-level Rubrics, Multiple Observations, and Student Achievement Gains	21	11.1	30.9	15	12.2	17.7
District Differentiated Teacher Compensation Based On Student Achievement Gains	16	6.9	24.8	5*	3.4	7.6

*Percentage is significantly different from percentage for high-poverty districts ($p<0.05$).

Notes: The percentages in this table are cross-sectional estimates for the population of districts operating in the 2010-11 school year. The denominator for the high poverty percentages is the estimated number of high-poverty districts (had a child poverty rate above 21.66 percent) that have sufficient data. The denominator for the other percentages is the estimated number of districts with sufficient data that had a child poverty rate at or below 21.66 percent. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE) program, district data for 2008 (USSD08.xls) for poverty data. Retrieved November 11, 2010, from http://www.census.gov/did/www/saipe/data/schools/index.html.

Table E-8. Confidence intervals for percentage of large districts and districts of other sizes that implemented reforms related to educator workforce development: 2011-12

	Large			Medium			Small		
Indicator description	**%**	**Low CI**	**High CI**	**%**	**Low CI**	**High CI**	**%**	**Low CI**	**High CI**
District Provided School Leaders with Professional Development or Flexibility to Hire Effective Teachers	74	73.7	73.7	71	66.7	75.1	63*	55.3	69.7
District Used Student Achievement Gains for Teacher Tenure, Dismissal, or Assignment Decisions	34	34.1	34.1	26*	22.0	30.3	24*	19.3	29.1
District Operated a Principal Evaluation System that Included Student Achievement Gains	59	59.2	59.2	50*	46.2	54.6	29*	23.4	35.2
District Operated a Teacher Evaluation System that Included Multi-level Rubrics, Multiple Observations, and Student Achievement Gains	37	37.4	37.4	22*	17.9	26.6	16*	12.7	19.8
District Differentiated Teacher Compensation Based On Student Achievement Gains	38	37.9	37.9	12*	9.5	14.9	8*	5.0	10.9

*Percentage is significantly different from percentage for large districts ($p<0.05$).

Notes: The percentages in this table are cross-sectional estimates for the population of districts operating in the 2010-11 school year. The denominator for a size group is the estimated number of districts of a given size with sufficient data. District size is based on the student enrollment in schools in the district. Large districts have at least 50,000 students. Medium districts have less than 50,000 but at least 15,000 students. Small districts have fewer than 15,000 students. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey. National Center for Education Statistics, Common Core of Data. Local Education Agency Universe Survey: School Year 2008–09 (ag081a.sas7bdat) for enrollment size. Retrieved August 24, 2010, from http://nces.ed.gov/ccd/pubagency.asp.

Table E-9. Confidence intervals for percentage of districts that reported major challenges when implementing educator evaluation and compensation systems: 2011-12

	District reported challenge as a major challenge[1]			Districts rated the challenge[2]		
District challenge	%	Low CI	High CI	%	Low CI	High CI
Insufficient funding to provide differential compensation for teachers in high-need areas (e.g., low-performing schools, STEM subjects)	84	79.6	88.9	53	46.5	60.5
Insufficient funding to provide performance-based compensation to all eligible teachers	83	78.1	88.5	57	49.0	65.1
Concerns or opposition from school staff or staff unions about performance-based compensation	59	48.5	69.5	73	66.3	79.6
Difficulty in measuring student growth for teachers of non-tested subjects	59	51.3	66.4	88	84.9	92.0
Restrictions in rules and regulations on how educators can be compensated	56	48.6	62.8	74	67.0	81.2
Concerns or opposition from school staff or staff unions about evaluating educators based, at least in part, on student achievement	50	40.4	59.4	80	73.6	85.5
Lack of clear SEA guidance or support on educator compensation or evaluation system	36	27.2	45.7	78	71.5	84.0
Restrictions in rules and regulations on how educators can be evaluated	36	26.9	45.1	84	77.9	89.9
Lack of district staff capacity or expertise to conduct comprehensive educator performance evaluations	26	16.8	35.0	85	79.6	89.8
Lack of district staff capacity or expertise to develop reliable approaches for rating educator performance-based, in part, on student achievement	22	15.6	28.2	78	72.2	82.9
Current data systems make linking student test data to individual teachers difficult	19	13.9	23.3	87	82.9	92.1
Lack of district staff capacity or expertise to identify professional development needs of teachers based on performance evaluations	10	6.1	14.9	87	82.7	91.3

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge.

[2] Districts rating the challenge excludes districts that identified the challenge as not applicable and districts that did not respond to the question.

Notes: The percentages in this table are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table E-10. Results of significance tests comparing percentages of districts that reported major challenges when implementing educator evaluation and compensation systems: 2011-12

Ref. #	Challenge description	Percent[1]
1	Insufficient funding to provide differential compensation for teachers in high-need areas (e.g., low-performing schools, STEM subjects)	84
2	Insufficient funding to provide performance-based compensation to all eligible teachers	83
3	Concerns or opposition from school staff or staff unions about performance-based compensation	59
4	Difficulty in measuring student growth for teachers of non-tested subjects	59
5	Restrictions in rules and regulations on how educators can be compensated	56
6	Concerns or opposition from school staff or staff unions about evaluating educators based, at least in part, on student achievement	50
7	Lack of clear SEA guidance or support on educator compensation or evaluation system	36
8	Restrictions in rules and regulations on how educators can be evaluated	36
9	Lack of district staff capacity or expertise to conduct comprehensive educator performance evaluations	26
10	Lack of district staff capacity or expertise to develop reliable approaches for rating educator performance-based, in part, on student achievement	22
11	Current data systems make linking student test data to individual teachers difficult	19
12	Lack of district staff capacity or expertise to identify professional development needs of teachers based on performance evaluations	10

[1] These are the percentage of districts that rated the challenge as major. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

(continued)

Table E-10. Results of significance tests comparing percentages of districts that reported major challenges when implementing educator evaluation and compensation systems: 2011-12 (cont'd)

Ref. #	1	2	3	4	5	6	7	8	9	10	11	12
1			*	*	*	*	*	*	*	*	*	*
2			*	*	*	*	*	*	*	*	*	*
3						*	*	*	*	*	*	*
4							*	*	*	*	*	*
5							*	*	*	*	*	*
6							*	*	*	*	*	*
7									*	*	*	*
8									*	*	*	*
9												*
10												*
11												*
12												

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by no asterisk in row 1, column 2, the percentage of districts that reported insufficient funding to provide differential compensation for teachers in high-need areas as a major challenge (84 percent) was not significantly different from the percentage reporting insufficient funding to provide performance-based compensation to all eligible teachers as a major challenge (83 percent). Use the reference number (Ref. #) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table E-11. Confidence intervals for percentage of schools that used student achievement gains for educator evaluation, compensation, and personnel decisions: 2009-10, 2010-11, and 2011-12

Indicator description	2009-10 %	2009-10 Low CI	2009-10 High CI	2010-11 %	2010-11 Low CI	2010-11 High CI	2011-12 %	2011-12 Low CI	2011-12 High CI
Principal Evaluation Practices Included Student Achievement Gains	45	41.6	48.7	**50**^	46.5	53.2	49	46.1	52.1
Teacher Tenure, Dismissal, or Reassignment Decisions Used Student Achievement Gains	29	26.3	31.0	**31**^	28.7	33.8	**34**†	31.1	36.2
Teacher Evaluation Practices Included Multi-level Rubrics, Multiple Observations, and Student Achievement Gains	18	15.1	21.4	**22**^	19.6	24.6	**18**§	16.1	20.1
Teacher Compensation Differentiated Based On Student Achievement Gains	12	9.7	14.2	12	10.4	14.5	**10**§	8.3	11.2

^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < 0.05$).
† Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < 0.05$).
§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < 0.05$).

Notes: The percentages in this table are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys.

Table E-12. Results of significance tests comparing percentages of schools that used student achievement gains for educator evaluation, compensation, and personnel decisions: 2011-12

Ref. #	Indicator description	Percent of schools[1]
1	Principal Evaluation Practices Included Student Achievement Gains	49
2	Teacher Tenure, Dismissal, or Reassignment Decisions Used Student Achievement Gains	34
3	Teacher Evaluation Practices Included Multi-level Rubrics, Multiple Observations, and Student Achievement Gains	18
4	Teacher Compensation Differentiated Based On Student Achievement Gains	10

[1] These percentages show the percentage of schools that satisfied the requirements of the indicator. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Ref. #	1	2	3	4
1		*	*	*
2			*	*
3				*
4				

*Percentages are significantly different ($p < 0.05$)

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of schools' principal evaluation practices included student achievement gains (49 percent) than used student achievement gains for teacher tenure, dismissal, or assignment decisions (34 percent). Use the reference number (Ref #) to identify the indicator.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table E-13. Confidence intervals for percentage of low-performing and other schools that used student achievement gains for educator evaluation, compensation, and personnel decisions: 2011-12

Indicator description	Low-performing schools			Other schools		
	%	Low CI	High CI	%	Low CI	High CI
Principal Evaluation Practices Included Student Achievement Gains	57	51.3	63.7	**47***	44.3	50.4
Teacher Tenure, Dismissal, or Reassignment Decisions Used Student Achievement Gains	35	28.1	42.7	33	30.5	36.0
Teacher Evaluation Practices Included Multi-level Rubrics, Multiple Observations, and Student Achievement Gains	20	14.3	26.0	18	15.4	20.0
Teacher Compensation Differentiated Based On Student Achievement Gains	14	10.3	18.6	**9***	7.2	10.4

* Percentage is significantly different from percentage for low-performing schools ($p<0.05$).

Notes: The percentages in this table are cross-sectional estimates for the population of schools operating in the 2010-11 school year. The denominator is the estimated number of schools in the performance status category (low-performing, other) with sufficient data. Low-performing schools include schools that were (1) in improvement, corrective action, or restructuring, (2) identified as among the lowest achieving schools, or (3) have had a graduation rate below 60 percent over a number of years. Performance data obtained from approved state applications for School Improvement Grants. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement Grants for school performance status. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Table E-14. Confidence intervals for percentage of schools that reported major challenges when implementing educator evaluation and compensation systems: 2011-12

School challenge	School reported challenge as a major challenge[1]			School rated the challenge[2]		
	Percent	Low CI	High CI	Percent	Low CI	High CI
Insufficient funding to provide performance-based compensation to all eligible teachers	73	69.2	76.2	49	45.5	52.8
Insufficient funding to provide differential compensation for teachers in high-need areas (e.g., STEM subjects)	70	66.7	73.3	47	43.8	50.9
Concerns or opposition from school staff or staff unions about performance-based compensation	55	50.6	59.3	64	61.1	67.1
Difficulty in measuring student growth for teachers of non-tested subjects	47	43.8	50.6	81	78.9	84.1
Restrictions in rules and regulations on how educators can be compensated	47	42.2	51.0	67	64.2	70.1
Concerns or opposition from school staff or staff unions about evaluating educators based, at least in part, on student achievement	41	37.7	45.0	74	71.4	76.7
Restrictions in rules and regulations on how educators can be evaluated	23	20.0	26.6	84	81.4	86.8
Lack of school staff capacity or expertise to conduct comprehensive educator performance evaluations	16	12.4	19.6	84	81.8	86.5
Lack of clear district guidance or support on educator compensation or evaluation system	15	12.3	16.9	71	66.9	74.7
Limited access to technology needed in order to link student test data to individual teachers	11	8.7	12.7	83	79.8	86.8
Lack of school staff capacity or expertise to Identify professional development needs of teachers based on performance evaluations	8	5.6	9.9	86	83.7	88.2

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge.

[2] Schools rating the challenge excludes schools that identified the challenge as not applicable and schools that did not respond to the question.

Notes: The percentages in this table are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table E-15. Results of significance tests comparing percentages of schools that reported major challenges when implementing educator evaluation and compensation systems: 2011-12

Ref. #	Challenge description	Percent[1]
1	Insufficient funding to provide performance-based compensation to all eligible teachers	73
2	Insufficient funding to provide differential compensation for teachers in high-need areas (e.g., STEM subjects)	70
3	Concerns or opposition from school staff or staff unions about performance-based compensation	55
4	Difficulty in measuring student growth for teachers of non-tested subjects	47
5	Restrictions in rules and regulations on how educators can be compensated	47
6	Concerns or opposition from school staff or staff unions about evaluating educators based, at least in part, on student achievement	41
7	Restrictions in rules and regulations on how educators can be evaluated	23
8	Lack of school staff capacity or expertise to conduct comprehensive educator performance evaluations	16
9	Lack of clear district guidance or support on educator compensation or evaluation system	15
10	Limited access to technology needed in order to link student test data to individual teachers	11
11	Lack of school staff capacity or expertise to identify professional development needs of teachers based on performance evaluations	8

[1] These are the percentage of schools that rated the challenge as major. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

(continued)

Table E-15. Results of significance tests comparing percentages of schools that reported major challenges when implementing educator evaluation and compensation systems: 2011-12 (cont'd)

Ref. #	1	2	3	4	5	6	7	8	9	10	11
1			*	*	*	*	*	*	*	*	*
2			*	*	*	*	*	*	*	*	*
3				*	*	*	*	*	*	*	*
4						*	*	*	*	*	*
5						*	*	*	*	*	*
6							*	*	*	*	*
7								*	*	*	*
8										*	*
9										*	*
10											*
11											

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by no asterisk in row 1, column 2, the percentage of schools that reported insufficient funding to provide performance-based compensation to all eligible teachers as a major challenge (73 percent) is not significantly different from the percentage reporting insufficient funding to provide differential compensation for teachers in high-need areas as a major challenge (70 percent). Use the reference number (Ref. #) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

This page intentionally blank.

Appendix F
Detailed Tables for
Improving Low-Performing Schools Chapter

This page intentionally blank.

Table F-1. Percentage of districts that replaced principal and teachers in low-performing schools, 2011-12

District policies or programs to support school restructuring or reorganization:	Percent
Replace a substantial proportion of the teachers in individual low-performing schools	6
Replace principals in individual low-performing schools	16
At least one of the above	17
MET INDICATOR (district replaced teachers and principal)	**5**

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table F-2. Confidence intervals for percentage of districts with low-performing schools that implemented reforms to support improvement in low-performing schools: 2011-12

Indicator description	2011-12 %	2011-12 Low CI	2011-12 High CI
District Implemented Programs in Low-Performing Schools to Encourage Family and Community Involvement	78	63.7	92.6
District Provided Technical Assistance to Low-Performing Schools to Screen or Select School Improvement Experts or Models[1]	50	38.0	62.4
District Extended School Day, Week, or Year in Low-Performing Schools	40	26.7	53.4
District Required Low-Performing Schools to Partner with Organizations that Specialize in Instructional Improvement	39	29.4	49.6
District Provided School Leaders in Low-Performing Schools with Staffing or Budgeting Flexibility to Implement School Reform	23	12.6	33.2
District Provided Compensation Incentives to Improve Staffing at Low-Performing Schools	16	8.4	22.8
District Replaced Principal and Teachers in Low-Performing Schools[1]	5	3.5	6.4
District Contracted with External Organization to Operate Low-Performing Schools	3	2.2	4.4
District Targeted Low-Performing Schools for Closure[1]	2	1.1	3.5

[1] Districts responding to the evaluation's survey may have interpreted the improvement strategies included in this indicator as referring to actions that occur on a less than annual basis. As a consequence, these indicators may underestimate the percentage of districts supporting improvement using these strategies.

Notes: The percentages in the figure are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year and have low-performing schools. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator is the estimated number of districts with sufficient data that reported in the evaluation's 2012 district survey they had low-performing schools in that year.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table F-3. Results of significance tests comparing percentages of districts with low-performing schools that implemented reforms to support improvement in low-performing schools: 2011-12

Ref. #	Indicator description	Percent of districts[1]
1	District Implemented Programs in Low-Performing Schools to Encourage Family and Community Involvement	78
2	District Provided Technical Assistance to Low-Performing Schools to Screen or Select School Improvement Experts or Models	50
3	District Extended School Day, Week, or Year in Low-Performing Schools	40
4	District Required Low-Performing Schools to Partner with Organizations that Specialize in Instructional Improvement	39
5	District Provided School Leaders in Low-Performing Schools with Staffing or Budgeting Flexibility to Implement School Reform	23
6	District Provided Compensation Incentives to Improve Staffing at Low-Performing Schools	16
7	District Replaced Principal and Teachers in Low-Performing Schools	5
8	District Contracted with External Organization to Operate Low-Performing Schools	3
9	District Targeted Low-Performing Schools for Closure	2

[1] These are the percentage of districts with low performing schools that rated the challenge as major. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Ref. #	1	2	3	4	5	6	7	8	9
1		*	*	*	*	*	*	*	*
2					*	*	*	*	*
3					*	*	*	*	*
4					*	*	*	*	*
5							*	*	*
6							*	*	*
7								*	*
8									
9									

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of districts implemented programs in low-performing schools to encourage family and community involvement (78 percent) than provided technical assistance to low-performing schools to screen or select school improvement experts or models (50 percent). Use the reference number (Ref. #) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table F-4. Confidence intervals for percentage of districts with low-performing schools that reported major challenges when supporting school restructuring and improvement: 2011-12

	District reported challenge as a major challenge[1]			Districts rated the challenge[2]		
District challenge	Percent	Low CI	High CI	Percent	Low CI	High CI
Insufficient funding to implement whole-school or turnaround intervention models	65	51.8	79.0	65	52.2	78.0
Insufficient funding to make substantial changes to school day or year schedules	57	39.4	73.8	80	72.8	87.2
Restrictions in rules and regulations regarding extent of autonomy that schools can be granted in terms of staffing or budgets	48	31.2	64.0	68	56.1	79.7
Insufficient funding to support school-based experts (outside consultants, instructional specialists or coaches, mentors)	45	31.4	59.4	93	90.1	96.8
Insufficient funding to support special programs for students and families	41	27.6	55.4	92	88.9	96.0
Concerns or opposition from parents or community groups about closing or restructuring schools	41	23.0	58.9	50	37.3	63.7
Restrictions in rules and regulations regarding extension of school days or years	40	22.6	56.4	68	55.3	79.9
Insufficient help from local social services and other community-based organizations in providing services to students and their families	38	23.5	52.6	87	77.2	97.0
Restrictions in rules and regulations regarding number of schools that can be closed, opened as charters or restructured in other ways	33	16.1	49.1	27	18.2	35.4
Lack of district staff capacity or expertise to screen or provide guidance or advice about EMOs and CMOs[3]	31	17.8	44.2	32	22.6	41.5
Unwillingness of high-performing teachers to move to low-performing schools	30	22.8	36.6	38	28.1	47.3
Lack of district staff capacity or expertise to provide guidance or advice concerning whole-school or turn around intervention models	29	12.6	45.7	66	52.3	80.3
Lack of evidence about performance of CMOs or EMOs or other intervention experts[3]	22	11.4	31.9	32	23.3	41.7

(continued)

Table F-4. Confidence intervals for percentage of districts with low-performing schools that reported major challenges when supporting school restructuring and improvement: 2011-12 (cont'd)

	District reported challenge as a major challenge[1]			Districts rated the challenge[2]		
District challenge	Percent	Low CI	High CI	Percent	Low CI	High CI
Lack of clear SEA guidance or support focused on adoption of whole-school reform models	15	10.2	20.5	54	39.5	69.0
Lack of district staff capacity or expertise to train instructional specialists, coaches, lead teachers, or school-based professional development staff	15	7.8	22.6	94	91.1	97.0
Current data systems make tracking the success of school improvement efforts difficult	10	5.1	15.6	96	93.1	97.9
Lack of evidence about effectiveness of school improvement models	9	4.5	14.1	77	63.8	89.8

[1] The challenge could be rated as not a challenge, a minor challenge, or a major challenge. Districts that identified the challenge as not applicable and districts without low-performing schools were excluded from the denominator.

[2] Districts rating the challenge excludes districts that identified the challenge as not applicable, districts that did not respond to the question, and districts without low-performing schools.

[3] An EMO is an education management organization. A CMO is a charter management organization.

Notes: The percentages in the table are cross-sectional estimates for the population of districts with low-performing schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table F-5. Results of significance tests comparing percentages of districts with low-performing schools reported major challenges when supporting school restructuring and improvement: 2011-12

Ref. #	Challenge description	Percent[1]
1	Insufficient funding to implement whole-school or turnaround intervention models	65
2	Insufficient funding to make substantial changes to school day or year schedules	57
3	Restrictions in rules and regulations regarding extent of autonomy that schools can be granted in terms of staffing or budgets	48
4	Insufficient funding to support school-based experts (outside consultants, instructional specialists or coaches, mentors)	45
5	Insufficient funding to support special programs for students and families	41
6	Concerns or opposition from parents or community groups about closing or restructuring schools	41
7	Restrictions in rules and regulations regarding extension of school days or years	40
8	Insufficient help from local social services and other community-based organizations in providing services to students and their families	38
9	Restrictions in rules and regulations regarding number of schools that can be closed, opened as charters or restructured in other ways	33
10	Lack of district staff capacity or expertise to screen or provide guidance or advice about EMOs and CMOs[1]	31
11	Unwillingness of high-performing teachers to move to low-performing schools	30
12	Lack of district staff capacity or expertise to provide guidance or advice concerning whole-school or turn around intervention models	29
13	Lack of evidence about performance of CMOs or EMOs or other intervention experts[2]	22
14	Lack of clear SEA guidance or support focused on adoption of whole-school reform models	15
15	Lack of district staff capacity or expertise to train instructional specialists, coaches, lead teachers, or school-based professional development staff	15
16	Current data systems make tracking the success of school improvement efforts difficult	10
17	Lack of evidence about effectiveness of school improvement models	9

[1] Percentage of districts with low-performing schools that rated the challenge as major. They are cross-sectional estimates for the population of districts operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

[2] An EMO is an education management organization. A CMO is a charter management organization.

(continued)

Table F-5. Results of significance tests comparing percentages of districts with low-performing schools reported major challenges when supporting school restructuring and improvement: 2011-12 (cont'd)

Ref #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2					*		*			*	*	*	*	*	*	*	*
3								*			*	*	*	*	*	*	*
4											*	*	*	*	*	*	*
5														*	*	*	*
6												*		*	*	*	*
7														*	*	*	*
8														*	*	*	*
9																*	*
10														*	*	*	*
11														*	*	*	*
12																	*
13																*	*
14																	*
15																*	
16																	
17																	

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by no asterisk in row 1, column 2, the percentage of districts that reported insufficient funding to implement whole-school or turnaround intervention models as a major challenge (65 percent) is not significantly different from the percentage that rated Insufficient funding to make substantial changes to school day or year schedules as a major challenge (57 percent). Use the reference number (Ref. N) to identify the challenge.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table F-6. Confidence intervals for percentage of low-performing schools that supported improvement: 2009-10, 2010-11, and 2011-12

Indicator description	2009-10 %	2009-10 Low CI	2009-10 High CI	2010-11 %	2010-11 Low CI	2010-11 High CI	2011-12 %	2011-12 Low CI	2011-12 High CI
School Implemented Programs to Encourage Family and Community Involvement	88	80.1	95.3	**95**^	86.8	100.0	**98**†	96.8	99.2
School Implemented Programs to Address Students' Social and Emotional Needs	81	72.9	88.7	**89**^	81.7	96.8	**91**†	88.1	94.1
School Implemented Programs to Orient Parents to School Improvement Models	69	63.6	74.2	**80**^	72.7	88.0	**79**†	73.9	83.9
School Modified Daily Schedule to Increase Instructional Time for Reading/English Language Arts or Mathematics	58	52.0	63.6	**72**^	65.0	79.8	**78**†	72.9	82.5
School Used Outside School Improvement Experts as Part of School Restructuring or to Improve Instruction	47	41.3	53.4	44	35.7	52.3	**66**†,§	59.9	71.5
Nonfinancial Incentives to Encourage Teachers to Move to or Remain in the School	22	13.6	31.0	**24**^	15.6	32.9	**21**	13.3	29.0
School Day, Week, or Year Extended as Part of School Restructuring	12	8.7	14.8	10	7.7	12.3	**19**†,§	15.6	22.4
Substantial Portion of Teachers Replaced as Part of School Restructuring	8	1.5	14.1	4	2.7	5.1	**11**§	7.3	15.4
Compensation Incentives for Teachers Who Move to Teach at the School	5	2.8	7.3	5	2.9	7.1	5	2.5	6.9
Staffing or Budgeting Autonomy Increased as Part of School Restructuring	5	2.6	6.4	7	0.9	12.7	**9**†	6.3	12.6
Effective Teachers Reassigned to School as Part of School Restructuring	4	1.8	5.4	4	2.5	6.1	5	3.0	6.0

^ Percentage for 2010-11 is significantly different from percentage for 2009-10 ($p < 0.05$).

† Percentage for 2011-12 is significantly different from percentage for 2009-10 ($p < 0.05$).

§ Percentage for 2011-12 is significantly different from percentage for 2010-11 ($p < 0.05$).

Notes: The percentages in the figure are cross-sectional estimates for the population of low-performing schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates. In this figure, the denominator is the estimated number of low-performing schools.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Surveys. Approved state applications for School Improvement grants for low-performing schools data. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Table F-7. Results of significance tests comparing percentages of low-performing schools that supported improvement: 2011-12

Ref. #	Indicator description	Percent of schools[1]
1	School Implemented Programs to Encourage Family and Community Involvement	98
2	School Implemented Programs to Address Students' Social and Emotional Needs	91
3	School Implemented Programs to Orient Parents to School Improvement Models	79
4	School Modified Daily Schedule to Increase Instructional Time for Reading/English Language Arts or Mathematics	78
5	School Used Outside School Improvement Experts as Part of School Restructuring or to Improve Instruction	66
6	Nonfinancial Incentives to Encourage Teachers to Move to or Remain in the School	21
7	School Day, Week, or Year Extended as Part of School Restructuring	19
8	Substantial Portion of Teachers Replaced as Part of School Restructuring	11
9	Staffing or Budgeting Autonomy Increased as Part of School Restructuring	9
10	Compensation Incentives for Teachers Who Move to Teach at the School	5
11	Effective Teachers Reassigned to School as Part of School Restructuring	5

[1] These are the percentage of low-performing schools that rated the challenge as major. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

(continued)

Table F-7. Results of significance tests comparing percentages of low-performing schools that supported improvement: 2011-12 (cont'd)

Ref. #	1	2	3	4	5	6	7	8	9	10	11
1		*	*	*	*	*	*	*	*	*	*
2			*	*	*	*	*	*	*	*	*
3					*	*	*	*	*	*	*
4					*	*	*	*	*	*	*
5						*	*	*	*	*	*
6								*	*	*	*
7								*	*	*	*
8										*	*
9										*	*
10											
11											

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by the asterisk in row 1, column 2, a significantly larger percentage of implemented programs to encourage family and community involvement (98 percent) than implemented programs to address students' social and emotional needs (91 percent). Use the reference number (Ref. #) to identify the indicator.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table F-8. Confidence intervals for percentage of low-performing schools that reported major challenges when working on school organization and improvement: 2011-12

School challenge	School reported challenge as a major challenge[1]			School rated the challenge[2]		
	%	Low CI	High CI	%	Low CI	High CI
Restrictions in rules and regulations on replacing less effective teachers	49	43.7	55.2	76	68.5	84.3
Insufficient funding to make substantial changes to school day or year schedules	45	35.9	53.6	73	65.5	80.0
Insufficient funding to support special programs for students and families	37	29.9	45.0	83	76.4	89.5
Restrictions in rules and regulations on making substantial changes to school day or year schedules	36	29.6	43.2	75	67.7	82.1
Insufficient funding to support school-based experts (outside consultants, instructional specialists or coaches, mentors)	36	28.8	43.9	83	76.8	90.1
Insufficient funding to purchase technology for classroom use	32	26.1	38.8	82	74.3	89.3
Insufficient help from local social services and other community-based organizations in providing services to students and their families	22	17.5	25.9	82	74.2	89.0
Lack of clear district guidance or support focused on staffing or budgeting decisions made at the school level	20	15.5	25.1	77	68.5	85.6
Lack of school staff capacity or expertise to effectively use technology to improve instruction	19	14.6	23.4	82	74.6	89.5
Lack of clear district guidance or support focused on implementing a whole-school intervention or turn around model	17	11.7	21.4	69	60.7	77.1
Concerns or opposition from parents or community groups about reform activities	9	4.8	12.6	75	67.0	83.3

[1] The challenge could be rated as not a challenge, as a minor challenge, or as a major challenge. Low-performing schools that identified the challenge as not applicable and schools that were not identified as low-performing were excluded from the denominator.

[2] Schools rating the challenge excludes schools that identified the challenge as not applicable, schools that did not respond to the question, and schools that were not low performing.

Notes: The percentages in the table are cross-sectional estimates for the population of low-performing schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Sources: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey. Approved state applications for School Improvement grants. Retrieved December 2010 from http://www2.ed.gov/programs/sif/.

Table F-9. Results of significance tests comparing percentages of low-performing schools that reported major challenges when working on school organization and improvement: 2011-12

Ref. #	Challenge description	Percent[1]
1	Restrictions in rules and regulations on replacing less effective teachers	49
2	Insufficient funding to make substantial changes to school day or year schedules	45
3	Insufficient funding to support special programs for students and families	37
4	Restrictions in rules and regulations on making substantial changes to school day or year schedules	36
5	Insufficient funding to support school-based experts (outside consultants, instructional specialists or coaches, mentors)	36
6	Insufficient funding to purchase technology for classroom use	32
7	Insufficient help from local social services and other community-based organizations in providing services to students and their families	22
8	Lack of clear district guidance or support focused on staffing or budgeting decisions made at the school level	20
9	Lack of school staff capacity or expertise to effectively use technology to improve instruction	19
10	Lack of clear district guidance or support focused on implementing a whole-school intervention or turn around model	17
11	Concerns or opposition from parents or community groups about reform activities	9

[1] These are the percentage of low-performing schools that rated the challenge as major. They are cross-sectional estimates for the population of schools operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

(continued)

Table F-9. Results of significance tests comparing percentages of low-performing schools that reported major challenges when working on school organization and improvement: 2011-12 (cont'd)

Ref. #	1	2	3	4	5	6	7	8	9	10	11
1			*	*	*	*	*	*	*	*	*
2			*	*	*	*	*	*	*	*	*
3							*	*	*	*	*
4							*	*	*	*	*
5							*	*	*	*	*
6							*	*	*	*	*
7										*	*
8										*	*
9											*
10											*
11											

*Percentages are significantly different ($p < 0.05$).

Table reads: As denoted by no asterisk in row 1, column 2, the percentage of schools that reported restrictions in rules and regulations on replacing less effective teachers as a major challenge (49 percent) is not significantly different from the percentage that rated insufficient funding to make substantial changes to school day or year schedules as a major challenge (45 percent).

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

This page is intentionally blank.

Appendix G
Detailed Tables for
Reforms Across Assurance Areas Chapter

This page intentionally blank.

Table G-1. Percentage of districts that implemented reforms in standards and assessments, data systems, and educator workforce development in 2009-10 and 2011-12, by number of indicators met

Number of indicators met	Percent	
	2009-10	2011-12
12	<1	1
11	3	2
10	3	8
9	10	7
8	14	14
7	15	14
6	15	17
5	10	15
4	16	9
3	7	6
2	2	3
1	2	2
0	3	<1

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. The denominator for these percentages is the estimated number of districts with sufficient data (i.e., answered enough questions to calculate the indicator). Because the Common Core State Standards were not available until 2010-11, for 2009-10 the number of indicators met includes the district's 2010-11 status for the four standards and assessments indicators.

Table G-2. Percentage of schools that implemented reforms in standards and assessments, data systems, and educator workforce development in 2009-10 and 2011-12, by number of indicators met

Number of indicators met	Percent	
	2009-10	2011-12
11	1	1
10	2	4
9	5	8
8	10	15
7	14	21
6	19	19
5	16	14
6	13	9
7	9	5
2	4	2
1	1	<1
0	5	3

Notes: The percentages in the table are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. Because the Common Core State Standards were not available until 2010-11, for 2009-10 the number of indicators met includes the school's 2010-11 status for the three standards and assessments indicators.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Survey.

Table G-3. Confidence intervals for percentage of districts that implemented reforms in standards and assessments, data systems, and educator workforce development in 2011-12, by number of indicators met

Number of indicators met	Percent of all districts	Low CI	High CI
12	1	0.5	1.6
11	2	1.3	2.6
10	8	2.8	13.9
9	7	5.1	8.7
8	14	10.4	18.0
7	14	11.5	16.5
6	17	11.7	23.2
5	15	9.0	20.6
4	9	5.6	13.0
3	6	2.5	8.8
2	3	1.8	5.1
1	2	1.2	3.6
0	0.49	0	1.0

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table G-4. Confidence intervals for percentage of schools that implemented reforms in standards and assessments, data systems, and educator workforce development in 2011-12

Number of indicators met	Percent of all schools	Low CI	High CI
11	1	0.5	1.5
10	4	2.8	4.8
9	8	7.0	9.9
8	15	12.4	17.2
7	21	18.0	23.0
6	19	16.3	21.1
5	14	12.0	16.3
4	9	6.5	10.5
3	5	1.8	8.6
2	2	0.7	2.3
1	0.46	0.2	0.7
0	3	1.9	4.0

Notes: The percentages in the table are cross-sectional estimates for the population of schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.

Table G-5. Percentage of low-performing schools that supported reforms in school improvement in 2009-10 and 2011-12, by number of indicators met

Number of indicators met	Percent	
	2009-10	2011-12
11	0	<1
10	<1	1
9	<1	<1
8	2	2
7	4	5
6	8	12
5	21	31
4	27	26
3	18	10
2	7	4
1	7	1
0	7	8

Notes: The percentages in the table are cross-sectional estimates for the population of low-performing schools that were operating in the 2010-11 school year.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2011 and Spring 2012 School Survey.

Table G-6. Confidence intervals for percentage of districts with low-performing schools that implemented school improvement reforms in 2011-12

Number of indicators met	Percent of districts with low performing schools	Low CI	High CI
9	0.08	0.02	0.1
8	1	0	1.2
7	3	1.9	3.6
6	2	1.3	3.4
5	9	2.8	14.4
4	16	5.1	27.5
3	17	11.4	23.2
2	22	8.5	35.8
1	13	8.0	18.1
0	17	2.8	31.0

Notes: The percentages in the table are cross-sectional estimates for the population of districts that were operating in the 2010-11 school year and have low-performing schools. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 District Survey.

Table G-7. Confidence intervals for percentage of low-performing schools that supported reforms in school improvement in 2011-12

Number of indicators met	Percent of low performing schools	Low CI	High CI
11	0.01	0	0.03
10	1	0	1.4
9	0.38	0	0.79
8	2	1.2	3.0
7	5	3.6	6.9
6	12	8.4	16.0
5	31	24.8	36.7
4	26	17.0	34.1
3	10	7.1	13.9
2	4	1.9	5.8
1	1	0.2	2.4
0	8	2.1	13.1

Notes: The percentages in the table are cross-sectional estimates for the population of low-performing schools that were operating in the 2010-11 school year. See appendix A for more information about the generalizability of the estimates.

Source: U.S. Department of Education, Institute of Education Sciences, Charting the Progress of Education Reform: An Evaluation of the Recovery Act's Role: Spring 2012 School Survey.