

RACE TO THE TOP

Massachusetts Report

Year 2: School Year 2011–2012



U.S. Department of Education
Washington, DC 20202

February 1, 2013

Executive Summary

Race to the Top overview

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act of 2009 (ARRA), historic legislation designed to stimulate the economy, support job creation, and invest in critical sectors, including education. ARRA provided \$4.35 billion for the Race to the Top fund, of which approximately \$4 billion was used to fund comprehensive statewide reform grants under the Race to the Top program.¹ In 2010, the U.S. Department of Education (Department) awarded Race to the Top Phase 1 and Phase 2 grants to 11 States and the District of Columbia. The Race to the Top program is a competitive four-year grant program designed to encourage and reward States that are creating the conditions for education innovation and reform; achieving significant improvement in student outcomes, including making substantial gains in student achievement, closing achievement gaps, and improving high school graduation rates; and ensuring students are prepared for success in college and careers.

Since the Race to the Top Phase 1 and 2 competitions, the Department has made additional grants under Race to the Top Phase 3, Race to the Top – Early Learning Challenge, and Race to the Top – District. In 2011, the Department awarded Phase 3 grants to seven additional States, which were finalists in the 2010 Race to the Top Phase 1 and Phase 2 competitions. Also in 2011, the Department made seven awards under the Race to the Top – Early Learning Challenge to improve quality and expand access to early learning programs, and close the achievement gap for children with high needs. In 2012, four more States received Early Learning Challenge grants. Most recently, in 2012, the Department made awards to 16 applicants through the Race to the Top – District competition to support local educational agencies (LEAs) implementing locally developed plans to personalize and deepen student learning, directly improve student achievement and educator effectiveness, close achievement gaps, and prepare every student to succeed in college and career.

The Race to the Top program is built on the framework of comprehensive reform in four education reform areas:

- Adopting rigorous standards and assessments that prepare students for success in college and the workplace;
- Building data systems that measure student success and inform teachers and principals how they can improve their practices;
- Recruiting, developing, retaining, and rewarding effective teachers and principals; and
- Turning around the lowest-performing schools.

Since education is a complex system, sustained and lasting instructional improvement in classrooms, schools, LEAs, and States will not be achieved through piecemeal change. Race to the Top requires that States and LEAs participating in the State's Race to the Top plan (participating LEAs)² take into account their local context to design and implement the most effective and innovative approaches that meet the needs of their educators, students, and families.

Race to the Top program review

As part of the Department's commitment to supporting States as they implement ambitious reform agendas, the Department established the Implementation and Support Unit (ISU) in the Office of the Deputy Secretary to administer, among others, the Race to the Top program. The goal of the ISU is to provide assistance to States as they implement unprecedented and comprehensive reforms to improve student outcomes. Consistent with this goal, the Department has developed a Race to the Top program review process that not only addresses the Department's responsibilities for fiscal and programmatic oversight, but is also designed to identify areas in which Race to the Top grantees need assistance and support to meet their goals. Specifically, the ISU works with Race to the Top grantees to differentiate support based on individual State needs, and helps States work with each other and with experts to achieve and sustain educational reforms that improve student outcomes. In partnership with the ISU, the Reform Support Network (RSN) offers collective and individualized technical assistance and resources to Race to the Top grantees. The RSN's purpose is to support Race to the Top grantees as they implement reforms in education policy and practice, learn from each other, and build their capacity to sustain these reforms.

Grantees are accountable for the implementation of their approved Race to the Top plans, and the information and data gathered throughout the program review help to inform the Department's management and support of the Race to the Top grantees, as well as provide appropriate and timely updates to the public on their progress. In the event that adjustments are required to an approved plan, the grantee must submit a formal amendment request to the Department for consideration. States may submit for Department approval amendment requests to a plan and budget, provided such changes do not significantly affect the scope or objectives of the approved plans. In the event that the Department determines that a grantee is not meeting its goals, activities, timelines, budget, or annual targets, or is not fulfilling other applicable requirements, the Department will take appropriate enforcement action(s), consistent with 34 CFR section 80.43 in the Education Department General Administrative Regulations (EDGAR).³

¹ The remaining funds were awarded under the Race to the Top Assessment program. More information about the Race to the Top Assessment program is available at www.ed.gov/programs/racetothetop-assessment.

² Participating LEAs are those LEAs that choose to work with the State to implement all or significant portions of the State's Race to the Top plan, as specified in each LEA's Memorandum of Understanding with the State. Each participating LEA that receives funding under Title I, Part A will receive a share of the 50 percent of a State's grant award that the State must subgrant to LEAs, based on the LEA's relative share of Title I, Part A allocations in the most recent year, in accordance with section 14006(c) of the ARRA.

³ More information about the ISU's program review process, State APR data, and State Scopes of Work can be found at <http://www2.ed.gov/programs/racetothetop/index.html>.

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State-specific summary report

The Department uses the information gathered during the review process (e.g., through monthly calls, onsite reviews, and Annual Performance Reports (APRs)) to draft State-specific summary reports.⁴ The State-specific summary report serves as an assessment of a State's annual Race to the Top implementation. The Year 2 report for Phase 1 and 2 grantees highlights successes and accomplishments, identifies challenges, and provides lessons learned from implementation from approximately September 2011 through September 2012.

State's education reform agenda

Since the passage of Massachusetts' Education Reform Act in 1993, the State has focused on accelerating student achievement gains. In 2011, Massachusetts' fourth and eighth graders led the nation in reading and mathematics performance on the National Assessment of Educational Progress. Despite having high overall levels of student achievement, Massachusetts recognizes that not every student in the State receives a world-class education. Through Race to the Top, Massachusetts is implementing a comprehensive reform plan to help ensure that the State prepares every student for success in college and career.

In August 2010, the Department awarded Massachusetts a \$250 million Race to the Top grant to pursue its goals for improving student performance and closing student achievement gaps. The State's four objectives for the grant are as follows:

- *Great Teachers and Leaders:* Attract, develop, and retain an effective, academically capable, diverse and culturally proficient educator workforce to ensure that every student is taught by a great teacher, and every school and district is led by a great leader;
- *Curricular and Instructional Resources:* Provide curricular and instructional resources to give every educator the tools necessary to promote and support student achievement;
- *Concentrated Support in Low-Performing Schools:* Concentrate great instruction and additional supports for educators, students, and families in the lowest-performing schools and their districts to create the conditions needed for improved student achievement; and
- *College and Career Readiness:* Increase dramatically the number of students who graduate from high school ready for college and career.

Several of the State's programs target increased achievement in science, technology, engineering, and mathematics (STEM).

State Year 1 summary

In Year 1, Massachusetts prepared to implement its Race to the Top reforms through capacity building and planning in each reform area. The State established the Delivery Team within the Office of Planning and Research (OPR) to support effective project management.⁵ Massachusetts adopted the Common Core State Standards (CCSS) and took the first steps toward providing curricular resources to LEAs. Massachusetts approved new educator evaluation regulations and prepared the first cohort of LEAs to implement the new systems in Year 2. Thirty-five low-achieving schools initiated a school intervention model (including one school closure) in Year 1, and the State provided additional supports in five urban LEAs through Wraparound Zone grants.

State Year 2 summary

Accomplishments

In Year 2, Massachusetts continued to implement strong systems to track progress of projects, assess risk, and provide support of project implementation as needed. The State fully implemented project management structures through the Delivery approach, which regularly assesses project progress and identifies potential problems based on predetermined goals and objectives. The Delivery process allows for a candid assessment of project risks and timely application of action plans for projects that may be getting off track. The State demonstrated a strong understanding of its progress and the areas that required additional support. Additionally, the State proactively collaborated with key stakeholders throughout the development of major components of its Race to the Top reform efforts, which resulted in greater buy-in from educators during implementation.

The State laid a critical foundation in the first two years of the Race to the Top grant to support educators for school year (SY) 2012-2013 implementation of the Massachusetts Curriculum Framework for English Language Arts and the Massachusetts Curriculum Framework for Mathematics, which incorporate the CCSS. In Year 2, more than 150 educators participated in development of model curriculum units, and roughly 2,500 educators attended conferences or presentations on the new standards. The State launched its first STEM Early College High School and supported 13 Innovation Schools.

Massachusetts prepared its LEAs to implement rigorous new educator evaluation systems that clearly differentiate educators, include measures of student growth, and connect to professional

⁴ Additional State-specific data on progress against annual performance measures and goals reported in the Year 2 APRs can be found on the Race to the Top Data Display at www.rtt-apr.us.

⁵ The Delivery team is a team within ESE that implements the Delivery method of implementation, which emphasizes the use of real-time data, focused analysis and reports, and strong leadership involvement to drive implementation.

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development. Twenty-one LEAs, including nine Level 4 districts⁶, implemented educator evaluation systems based on the State's educator evaluation framework in Year 2. The State will use the results from an outside evaluation of implementation by the 21 LEAs to guide its support for other LEAs. Race to the Top participating LEAs will fully implement new educator evaluations in Year 3, and all other LEAs statewide are expected to implement new systems in Year 4. In Year 2, Massachusetts released a model evaluation system and extensive guidance for LEAs choosing to implement their own systems. Regional "Getting Started" workshops that explained the model evaluation system attracted over 1,000 educators.

Level 4 schools, which are called Priority Schools under the State's approved Elementary and Secondary Education Act (ESEA) flexibility request⁷, received extensive support from the Massachusetts Department of Elementary and Secondary Education (ESE). In Year 2, 34 Massachusetts schools implemented school intervention models, and 21 implemented Wraparound Zone grants. Massachusetts structured both initiatives to identify barriers to student achievement and work to improve student performance through school reform and comprehensive support. Comprehensive school reviews drove school improvement and informed the State's efforts to help low-achieving schools and LEAs build capacity to increase student performance.

Central to these efforts was the State's network of Priority Partners, a group of educational organizations that work in partnership with low-achieving LEAs to improve academic outcomes. The State expanded the Priority Partners network from seven partners in Year 1 to 24 partners in Year 2. Priority Partners are identified by the State as having demonstrated effectiveness in working with schools to address at least one of the following areas: students' social, emotional and health needs, effectiveness in maximizing learning time, effective use of data, and district systems of support. Additionally, in December 2011, the State launched the Network of Priority Partners, which is intended to facilitate communication among Priority Partners both within and across LEAs. The Network will enable the partners to share information and best practices, and coordinate and align services. It will also provide relevant information to the partners on ESE initiatives and goals, to inform their efforts and allow the partners to identify opportunities for alignment.

Challenges

While Massachusetts has put concerted time and resources into efforts to implement the schools interoperability framework (SIF) in order to improve the data collection process, there continued to be significant delays in this project. The State fell short of meeting its

performance measure for this project for the first two years of the grant. Progress in this area was impaired by factors such as challenges in filling positions and maintaining project staffing levels, and unexpected difficulties in working with LEA source data systems that are from the same vendor but are different versions of the product. The SIF project has many dependencies to other projects in Massachusetts' Race to the Top plan, so the current delays could have significant consequences for the completion of deliverables in other key areas of the Race to the Top grant. For instance, implementation of the SIF is needed for individuals using the teaching and learning system to access real-time data. Without that data, the teaching and learning system will not meet the needs of educators. Massachusetts has put a plan in place to address these challenges and the State has made some recent progress. In SY 2011-2012, year-end data for nine pilot LEAs were successfully collected through SIF. Massachusetts reported in its Year 2 APR that 119 LEAs were implementing SIF.

In SY 2011-2012, the State reported that 100 percent of LEAs implemented the CCSS, which are incorporated into the Massachusetts Curriculum Framework for English Language Arts and the Massachusetts Curriculum Framework for Mathematics. Nonetheless, the State faced an issue with timeliness of delivery of key materials to LEAs, such as model curriculum units and curriculum-embedded performance assessments (CEPAs). With the slow pace of piloting and rollout for model curriculum units and CEPAs, LEAs with lower capacity were left without exemplars to use as they began to transition to implementing new standards. The State initiated model curriculum map development late in SY 2011-2012, creating a tight timeframe for completing the maps and disseminating them to LEAs. Due to ties with the procurement of the teaching and learning system, the State's tools for interim assessments were not ready for piloting in Year 2. Additionally, the State continued to face delays in instituting MassCore, a rigorous diploma track designed to promote college and career readiness, as the default curriculum for high school students in the State. However, many LEAs engaged in local efforts to increase MassCore completion. The State reported in the SY 2011-2012 APR that over 69 percent of high school graduates completed the MassCore requirements for graduation.

LEAs faced challenges finalizing local collective bargaining agreements in time to prepare for implementation of educator evaluation systems in SY 2012-2013. The State reported in October 2012 that 88 of the 236 participating LEAs had ESE-approved evaluation system plans that align with the State's regulations. Given that agreements are being finalized after the start of the school year, LEAs will likely face challenges in implementation, as educators will have limited time to learn about the approved LEA system prior to implementation in SY 2012-2013.

⁶According to the State, definitions of Level 3 and Level 4 districts are as follows: Level 3—Districts with one or more schools among the lowest-performing 20 percent based on quantitative indicators. Level 4—Districts identified by quantitative and qualitative indicators through a district review; districts with one or more schools among the lowest-performing and least-improving 2 percent based on quantitative indicators.

⁷On September 23, 2011, the Department offered each interested State educational agency (SEA) the opportunity to request flexibility ("ESEA flexibility") on behalf of itself, its LEAs, and its schools, regarding specific requirements of the No Child Left Behind Act of 2001 (NCLB), in exchange for rigorous and comprehensive State-developed plans designed to improve educational outcomes for all students, close achievement gaps, increase equity, and improve the quality of instruction. For more information on ESEA Flexibility, see www.ed.gov/eSEA/flexibility.

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Looking ahead to Year 3

Massachusetts plans to fully implement the 2011 Massachusetts Curriculum Frameworks, which incorporate the CCSS, in Year 3. In addition, all Race to the Top participating LEAs will implement new educator evaluation systems. The State will continue to develop data systems and curricular materials that support these initiatives and will provide further guidance to LEAs as they roll out their new

curricula and evaluations. ESE's training programs for teachers and leaders will provide support to additional educators. The State's supports for low-achieving schools, such as Wraparound Zones grants and the State's district review process, will be expanded to Level 3 schools, as well as continue for Level 4 schools, in order to support both sets of schools as they implement the reforms needed to improve student performance.

State Success Factors

Building capacity to support LEAs

ESE's OPR houses key functions and personnel that enable Massachusetts to track progress and provide support to LEAs. ESE filled all key OPR roles in Year 2, and merged the State's existing LEA review processes with processes specific to Race to the Top.

Massachusetts established a system of direct ESE liaisons, which operate out of existing District and School Assistance Centers, to provide targeted support and encourage best practices in Levels 3 and 4 districts. Level 4 districts receive a dedicated liaison. According to the State, higher-performing LEAs are able to make requests of the State for similar support on an as-needed basis.

Support and accountability for LEAs

The State focused its existing LEA support on Level 3 and 4 districts. Massachusetts grouped its Race to the Top projects into six major areas for external program evaluations, which will provide in-depth feedback from a subset of LEAs regarding implementation. In Year 2, the State secured an evaluation vendor for every project area that had LEA activity in that year. Program staff collected formative feedback about program implementation, such as information about the educator evaluation system from early adopter districts (see *Great Teachers and Leaders*).

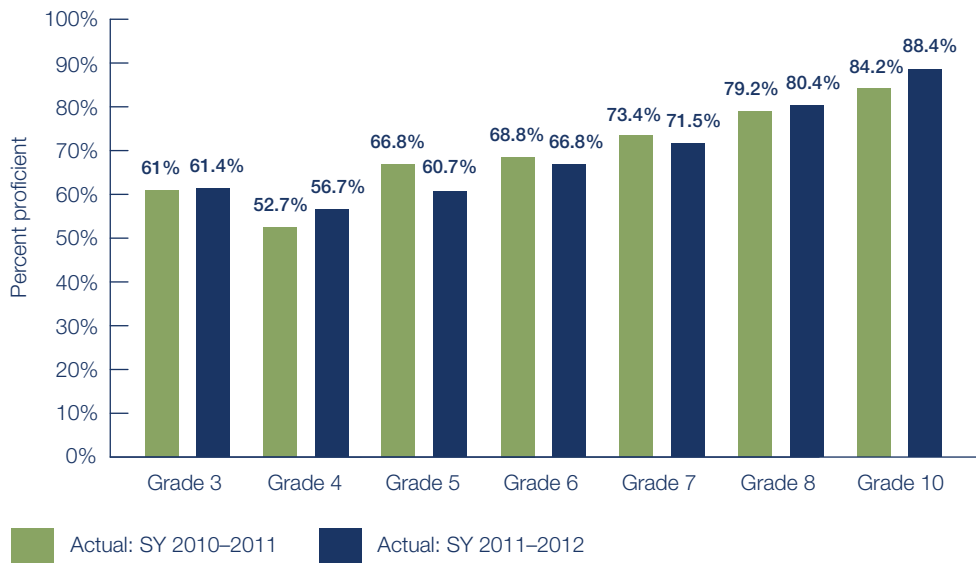
In Year 2, the State contributed to two of the Reform Support Network's publications that seek to spread best practices on supporting and collaborating with LEAs: *Effective Approaches to Collaboration: Models of Partnerships, Networks and Collaborative Strategies*; and *Driving Toward Results: Performance Management for Race to the Top Grantees*.⁸

Massachusetts plans to differentiate support to LEAs in Years 3 and 4 based on performance measure data.

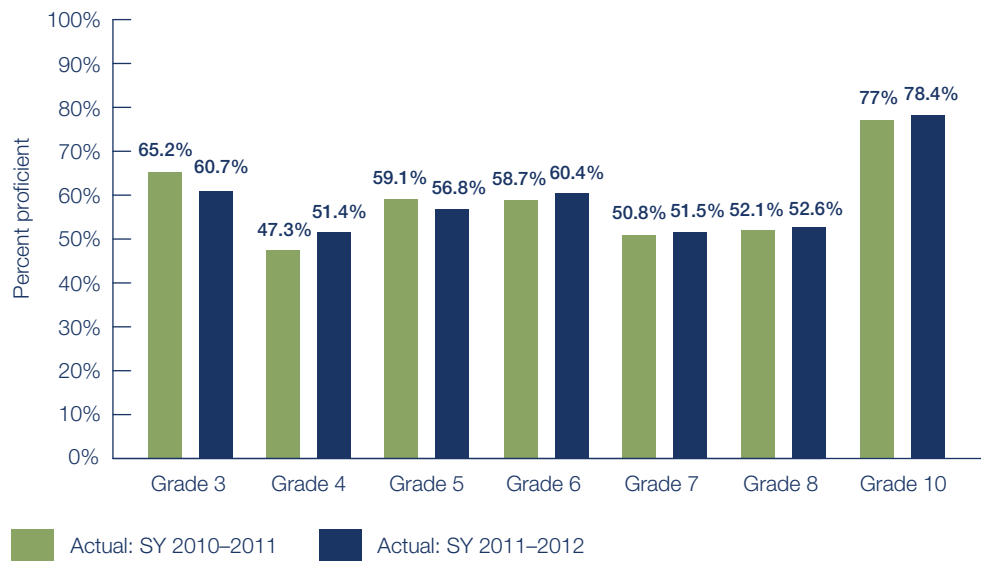
⁸The Reform Support Network's publications and documents can be found at <http://www2.ed.gov/about/inits/ed/implementation-support-unit/tech-assist/index.html>.

State Success Factors

Student Proficiency on Massachusetts' ELA Assessment



Student Proficiency on Massachusetts' Mathematics Assessment



Preliminary SY 2011-2012 data reported as of: September 17, 2012

NOTE: Over the last two years, a number of States adopted new assessments and/or cut scores.

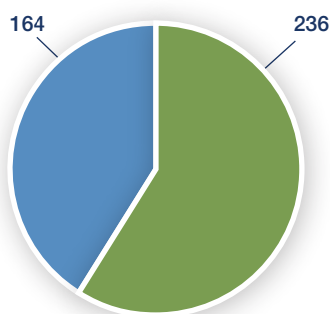
For State-reported context, please refer to the Race to the Top APR at www.rtt-apr.us.

State Success Factors

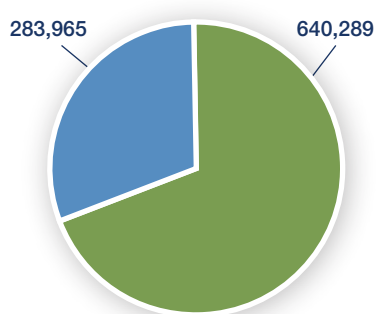
LEA participation

Of Massachusetts' 400 LEAs, 236 are participating in the State's Race to the Top plan. According to the State, these LEAs serve 69.3 percent of the State's students and over 82 percent of its students in poverty.

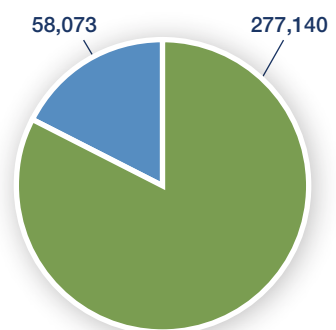
LEAs Participating in Massachusetts' Race to the Top Plan



K-12 Students in LEAs Participating in Massachusetts' Race to the Top Plan



Students in Poverty in LEAs Participating in Massachusetts' Race to the Top Plan



Participating LEAs (#)

Other LEAs

K-12 Students (#) in participating LEAs

K-12 Students (#) in other LEAs

Students in Poverty (#) in participating LEAs

Students in Poverty (#) in other LEAs

For State-reported context, please refer to the Race to the Top APR at www.rtt-apr.us.

Stakeholder engagement

To plan effective stakeholder engagement efforts, the State convened personnel from each project office to discuss its communications approach. Massachusetts worked across boundaries and engaged with a variety of stakeholders to develop the District Analysis and Review Tool (DART). DART presents ESE's school data in a form that helps parents, policymakers, and the public access data regarding LEA and school performance. Massachusetts plans to use LEA- and vendor-reported data, as well as State data, to compile a comprehensive Year 2 report on Race to the Top implementation, which will be shared with stakeholders.

The State actively communicated with LEA staff and educators during the first two years of grant implementation, articulating the State's vision, theory of action, and strategy. ESE developed a Race to the Top newsletter that is disseminated to LEAs quarterly via email and posted on ESE's website. In SY 2011-2012, the State hosted a conference for LEAs and stakeholder organizations that focused on the alignment of the educator evaluation framework and the Massachusetts Curriculum Frameworks. Communication and collaboration with key stakeholders throughout the development

of key projects such as the educator evaluation framework helped promote buy-in that has been valuable for some LEAs during the collective bargaining process.

Massachusetts undertook extensive stakeholder communication and outreach in Year 2 as part of a large-scale communications initiative that aimed to improve ESE's relationship with LEAs and educators in the field. For example, conferences and presentations on the new standards reached about 2,500 educators (see *Standards and Assessments*), and more than 1,000 LEA and school leaders attended "Getting Started" workshops on ESE's model educator evaluation system (see *Great Teachers and Leaders*). Stakeholder feedback played a key role in designing data systems, teacher licensure and preparation regulations, and many other projects (see *Data Systems to Support Instruction* and *Great Teachers and Leaders*).

An ESE survey indicated improvements in the ESE-LEA relationship, suggesting that ESE's focus on shifting from a compliance-oriented role to a support-oriented role has been effective. Massachusetts reported that the Delivery approach, which promotes communication and collaboration at the State level, was a key component of this shift.

State Success Factors

Continuous improvement

ESE used the Delivery method to ensure high-quality, timely implementation of Race to the Top projects. The Delivery Team regularly assessed progress against detailed Delivery plans that include implementation benchmarks and interim outcome measures. Regular evaluations enabled project managers to quickly and systematically address issues as they arose.

The Delivery Team monitored project implementation quality through three main processes: biweekly team check-ins, data reviews, and field visits. Biweekly team check-ins permitted team members to assess projects using a rubric and probing questions. Data reviews verified that projects were meeting the targets and trajectories specified in the delivery plan, such as outcome measures or the number of students or teachers the project affected. Field visits provided a qualitative look at implementation through teacher and administrator interviews. Together, these processes provided an early indication of the project's progress, quality of implementation, and potential challenges. Projects that Massachusetts identified as the most critical to its Race to the Top plan's overall success experienced especially rigorous assessments.

ESE further assessed progress and implementation quality through project manager meetings that convene once a month, executive sponsor meetings that occur every three weeks, and ad hoc meetings as needed. Executive sponsors are senior staff who lead each Race to the Top project area. Other project management methods included the Commissioner's monthly stocktakes, biannual reporting on performance measures defined in LEA Scopes of Work, and biweekly calls and other direct communication between the Race to the Top implementation manager and the Executive Office of Education. Additionally, vendors reported on performance measures through established templates. As with Delivery processes, these processes resulted in actions to address issues identified.

The State also used several project-specific methods to support continuous improvement. Several of Massachusetts' standards-related projects used surveys, emails, and in-person communication to assess LEA progress and experiences, as well as to identify areas for support. Information technology projects followed the Executive Office of Education's project management and software development processes, which included weekly status reports, schedules of key milestones, and risk assessments.

Successes, challenges, and lessons learned

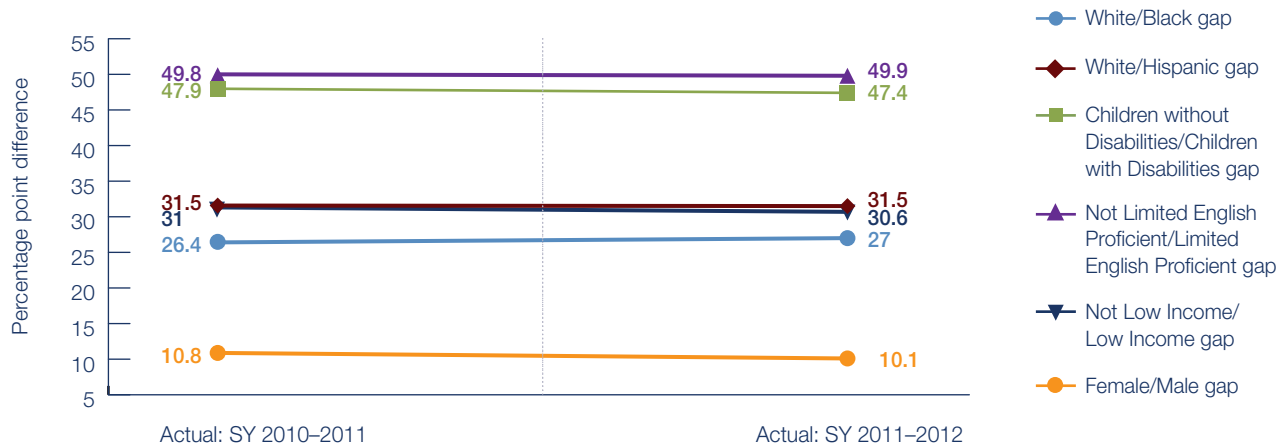
Massachusetts fully scaled up its key project management structures in Year 2. It established goals for its projects in each reform area and secured external evaluation vendors for all projects with Year 1 or Year 2 activity. The State provided further support and accountability through project manager meetings, executive sponsor meetings, monthly Commissioner stocktakes, and other processes. These structures helped identify areas for improvement, and aided in keeping projects on schedule, or developing action plans for projects that may be getting off track.

Through extensive communication and outreach, ESE improved its connection to educators in the field and began to shift from a compliance-oriented to a support-oriented role. The State leveraged a system of direct ESE liaisons for large urban LEAs. Support for Level 3 and Level 4 districts is based on existing structures, specifically regional centers that provide support. Level 4 districts have a dedicated liaison that is focused on project alignment and support. Stakeholder feedback suggested that these efforts improved buy-in for initiatives like the educator evaluation system. Key outreach sessions included the "Getting Started" workshops on the State's model educator evaluation system, which over 1,000 educators attended. In Year 3, the ESE aims to increase the degree to which it customizes LEA assistance.

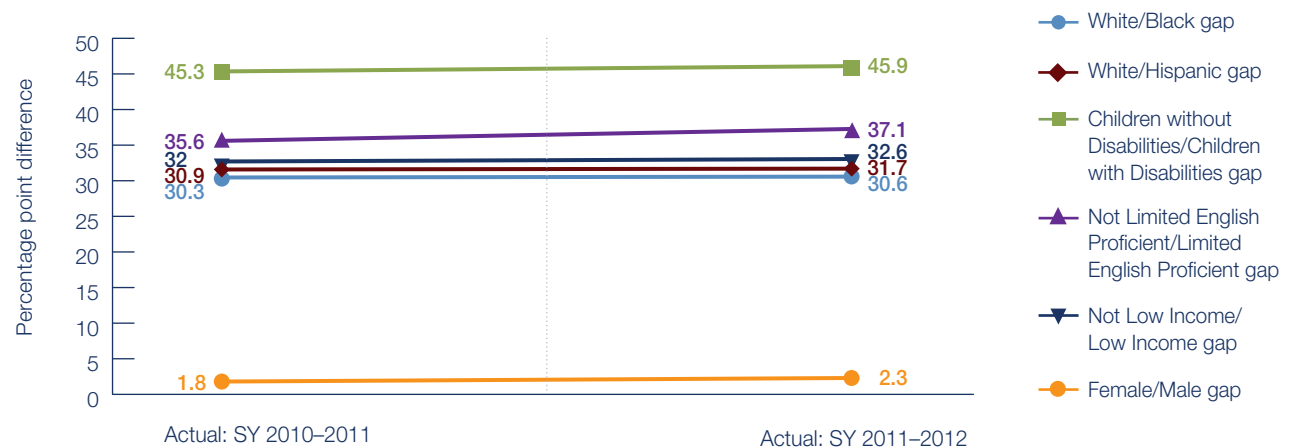
Massachusetts continued to face delays in implementing its new grants management system. Although the State reported in Year 1 that the system would be used for performance measure reporting for LEAs in Year 2, it continued to use an Excel spreadsheet template to collect performance measures from LEAs in June 2012. The State indicated that will implement the new system in June 2013. The State will preload information so that LEAs will not have to re-input information into the system. Once the grants management system is in place, the State will be able to more rapidly analyze performance data and use that data to provide LEAs with differentiated support.

State Success Factors

Achievement Gap on Massachusetts' ELA Assessment



Achievement Gap on Massachusetts' Mathematics Assessment



Preliminary SY 2011-2012 data reported as of: September 17, 2012

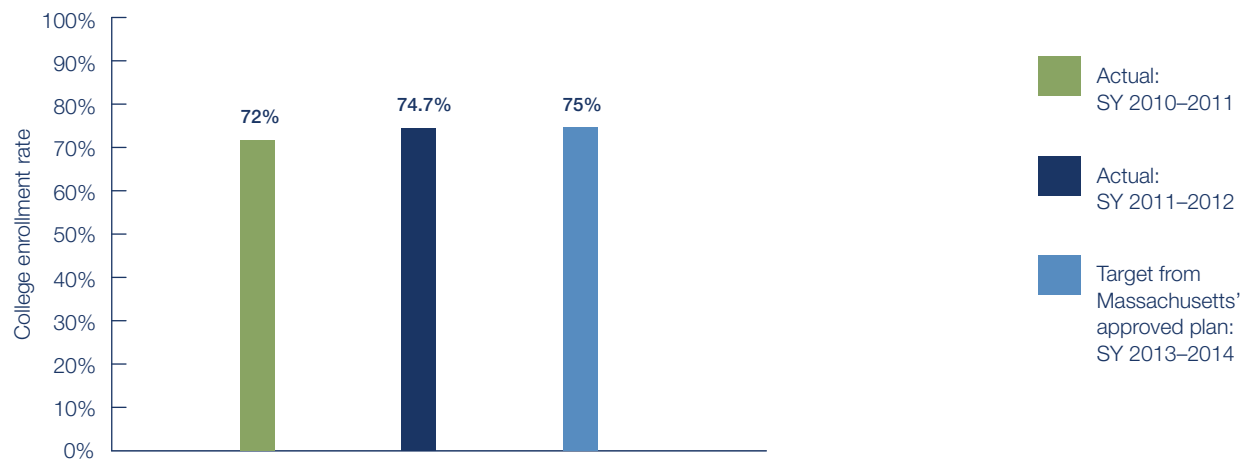
NOTE: Over the last two years, a number of States adopted new assessments and/or cut scores.

Numbers in the graph represent the gap in a school year between two subgroups on the State's ELA and mathematics assessments. Achievement gaps were calculated by subtracting the percent of students scoring proficient in the lower-performing subgroup from the percent of students scoring proficient in the higher-performing subgroup to get the percentage point difference between the proficiency of the two subgroups. If the achievement gap narrowed between two subgroups, the line will slope downward. If the achievement gap increased between two subgroups, the line will slope upward.

For State-reported context, please refer to the Race to the Top APR at www.rtt-apr.us.

State Success Factors

College Enrollment Rates



Preliminary SY 2011-2012 data reported as of: September 28, 2012

For State-reported context, please refer to the Race to the Top APR at www.rtt-apr.us.

Standards and Assessments

Implementing rigorous college- and career-ready standards and assessments that prepare students for success in college and career is an integral aspect of education reform in all Race to the Top States.

Supporting the transition to college- and career-ready standards and high-quality assessments

Adopting standards and developing assessments

The Massachusetts Board of Elementary and Secondary Education (BESE) unanimously voted to adopt the CCSS in English language arts (ELA) and mathematics in July 2010. Year 2 was the second of two transition years between the State's previous standards and the new standards, the Massachusetts Curriculum Framework for English Language Arts and the Massachusetts Curriculum Framework for Mathematics. In Year 3, students will be assessed against the standards from the Curriculum Frameworks.

Massachusetts also took steps to revise its standards for other subjects. ESE's science content lead served on the writing team for the Next Generation Science Standards, which link science content to the CCSS. The State also adopted the 2012 World Class

Instructional Design and Assessment (WIDA) standards, which have been aligned to the CCSS. The State began to conduct professional development for educators on the WIDA standards in spring 2012.

ESE led the creation of model curriculum units and maps that will support LEAs in implementing the CCSS. More than 150 educators participated in curricular work group sessions to develop these units. The State reported in the SY 2011-2012 APR that 55 percent of grades and subjects had curriculum maps and at least one model curriculum unit. In Year 3, the State will pilot the model curriculum units in classrooms. Additionally, to further assess quality, Massachusetts will conduct a rubric-based panel review of the model curriculum units.

Through the RSN, Massachusetts collaborated with other Race to the Top States to guide its CCSS implementation efforts. In January 2012, the State met with 11 other Race to the Top States to discuss strategies to align educator effectiveness initiatives with CCSS implementation. It attended a similar RSN convening of Race to the Top States in April 2012 that specifically focused on educator engagement to facilitate the transition to the CCSS.

Standards and Assessments

In Year 2, Massachusetts developed 50 curriculum-embedded performance assessments (CEPAs). CEPAs are a task or series of tasks that provide students the opportunity to show mastery of multiple learning standards by creating a product or performance. Unlike a typical assessment, a CEPA may take place over the course of several days or weeks, and it allows students to demonstrate their knowledge by applying it in context. CEPAs are connected to model curriculum units to provide exemplars for educators of both effective instruction and assessment. For example, a model curriculum unit on “energy” for a high school science and technology/engineering class includes a CEPA asks that students construct a mousetrap car that uses a spring as a power source and meets certain criteria for construction and performance. A model curriculum unit for third graders that relates to writing about history includes a CEPA in which students are asked to develop a piece with words and illustrations that could be posted on the website of the local historical society and inform the public about the similarities and differences between the life of a student in Massachusetts today and the life of a student in the 1600s.

ESE also assisted LEAs as they aligned their own curricular documents to the CCSS. Eleven ESE content specialists provided direct assistance to LEAs in ELA and mathematics. The State shared examples of State-approved curriculum maps in ELA, mathematics, social studies, and science to help LEAs develop their own curriculum maps. In addition, the State provided mapping templates and guides, as well as train-the-trainer style trainings for curriculum work group members who in turn trained other educators in their home LEAs and schools. Data from a formal survey that was administered at the end of Year 2 will help ESE gauge LEA progress and identify areas for support.

Additionally, Massachusetts developed 50 CEPAs in Year 2. The State is continuing its development of CEPA guidelines and templates, and revisions of drafted CEPAs are currently underway.

To support the development of CCSS-aligned assessments, Massachusetts worked with the Partnership for Assessment of Readiness for College and Careers (PARCC) consortium as a governing member and continued to play an active role. The State’s Commissioner served as PARCC’s chairperson, and Massachusetts participated in many of PARCC’s working groups in Year 2. For example, the State appointed its ELA/literacy and mathematics content leads to PARCC Content Technical Working Groups, which developed the PARCC Model Content Frameworks for ELA/literacy and mathematics. In turn, ESE’s educator design teams used these frameworks to create curricular documents.

Since PARCC assessments will not be available until SY 2014–2015, the State began adapting the Massachusetts Comprehensive Assessment System (MCAS) to align with the CCSS, to ensure that educators and students are assessed on the new standards. To help educators prepare to teach content that aligns with the revised MCAS, ESE has released sample MCAS items on its website. The teaching and learning system, once launched, will also provide access to sample MCAS items.

Supporting college and career readiness

Massachusetts promoted college readiness through several initiatives. ESE’s pre-advanced placement (AP) trainings helped middle and early high school teachers prepare their students to meet high academic standards as AP students in 11th and 12th grade. Between fall 2011 and fall 2012, more than 1,000 teachers participated in nine regional trainings. This marked a significant improvement over Year 1, when the State provided this training for 462 educators. Massachusetts provided a grant opportunity for Level 3 districts to be reimbursed for educator participation in the pre-AP program, as part of its plan to expand access to the pre-AP training.

Although the adoption of MassCore as a statewide high school graduation requirement did not occur in Year 2, the State reports that many LEAs have examined whether they should make MassCore completion a requirement for high school graduation. MassCore requires students to complete one additional unit of mathematics (four in total), an additional lab-based science course (three in total), an additional unit of history or social science (three in total), and one course in the arts. To support LEAs in implementing the new standards and MassCore, ESE developed a guidance document that will help LEAs understand the conditions under which schools should offer students the opportunity to take Algebra I in eighth grade rather than in ninth grade. Through this document, ESE aims to ensure that eighth and ninth-grade Algebra I remain comparable.

The State promoted innovative school models aimed at helping students achieve higher standards for academic performance. Specifically, Massachusetts supported 13 Innovation Schools in Year 2 and approved an additional 25 in May 2012 for support in Year 3. Innovation Schools are in-district schools that have greater autonomy and flexibility on curriculum, scheduling, professional development, and other policies. ESE hosted a convening of existing and new Innovation School operators and provided ongoing technical assistance to Innovation Schools via webinars and other means. The State receives funds from the Gates Foundation and the Boston Foundation to support technical assistance. In addition, Massachusetts opened its first STEM Early College High School in Year 2 and five more schools entered the planning stage (see *Emphasis on Science, Technology, Engineering, and Mathematics*).

Standards and Assessments

ESE also addressed the critical role that school counselors play in facilitating college access for students through expansion of the Massachusetts Model for Comprehensive School Counseling Programs, a standards-based school counseling framework. Nineteen new LEAs took part in the initiative in Year 2.

ESE engaged stakeholders in its efforts to support college- and career-readiness. It collaborated with the Business Alliance for Education to guide messaging and outreach, and, in Year 3, a task force of local business, education, and community leaders will develop recommendations on how to better integrate college- and career-readiness into kindergarten through twelfth grade (K-12) education.

Dissemination of resources and professional development

Massachusetts provided professional development aimed at helping educators to understand the CCSS and the implications for classroom practice. A series of 26 regional presentations reached over 1,500 K-12 educators in winter and spring 2012. The State held a two-day conference on implementing the standards for about 600 administrators, as well as a conference on college readiness and PARCC assessments for 400 higher education faculty.

At the close of Year 2, Massachusetts was in the final stages of selecting a vendor for its new teaching and learning system in a joint procurement with Ohio. The system, called “Edwin Teaching and Learning” (Edwin) by Massachusetts, will provide access to the digital resource library, model curriculum units, interim assessments, and CEPAs. (For more on Edwin, see *Data Systems to Support Instruction*.)

ESE continued to develop resources for the planned digital resource library, which will allow educators to access both curricular and assessment resources. In Year 2, ESE worked to tag content from the current resource portal in preparation for its eventual migration to Edwin. Massachusetts worked with other States on developing common content tagging rules and other cross-State collaboration activities. ESE developed a rubric with Rhode Island and New York to evaluate model curriculum units that it has used to review units created by educator work groups, as described above. In Year 2, the State also decided to include vocational-technical materials within the teaching and learning system to support teachers and students in these programs.

Successes, challenges, and lessons learned

In Year 2, Massachusetts continued to ready itself for what the State calls “near full” implementation of new standards through extensive curricular development and educator outreach. Massachusetts took an active role in PARCC assessment development efforts and also engaged in creating resources to support standards implementation that extends beyond ELA and mathematics. Going into Year 3, the State was engaged with the challenge of ensuring that LEAs have the appropriate technology and infrastructure to support computer-based assessments.

The State’s educators engaged in the development of model curriculum units and CEPAs, and learned more about preparing students for AP courses through pre-AP training. While ESE developed curriculum units and maps in partnership with LEA staff, the materials and resources were not completed until the end of the summer 2012. Due to the delay in the development of materials, LEAs did not have those resources available when preparing for the full implementation of the new standards in SY 2012-2013. As a result, LEAs, particularly those with lower capacity, may have lacked adequate supports for educators who are implementing the new standards. In addition, efforts to increase completion of a rigorous college and career-ready curriculum, MassCore, continued to be locally driven, and lacked the support of a statewide requirement.

Since the teaching and learning system is still under development, the interim assessments were not available to educators in Year 2 (see *Data Systems to Support Instruction*). The State is using an alternative system for providing instructional resources until the teaching and learning system is available for use.

Data Systems to Support Instruction

Statewide longitudinal data systems (SLDS) and instructional improvement systems (IIS) enhance the ability of States to effectively manage, use, and analyze education data to support instruction. Race to the Top States are working to ensure that their data systems are accessible to key stakeholders and that the data support educators and decision-makers in their efforts to improve instruction and increase student achievement.

Fully implementing an SLDS

Massachusetts is working to link, upgrade, and expand its data systems so that schools will be able to track data more closely and better address their students' learning needs. Central to this effort is the SIF, which is intended to reduce the data reporting burden for schools and LEAs while also enabling educators to access student data in real time. Nine LEAs piloted the SIF in Year 2, which allowed the State to improve the framework based on user feedback and implementation challenges. In addition, the State completed essential work in developing data requirements.

Massachusetts set a target of having 122 LEAs implement the SIF in Year 1, but fell short due to implementation challenges, with 65 LEAs implementing in Year 1. Massachusetts recognized that this project needed additional support, and made greater progress in Year 2. The State reported in the APR for SY 2011-2012 that 119 LEAs were implementing the SIF. The State indicated that in implementing LEAs, the SIF promoted a greater attention to data quality.

Massachusetts continued improving the Education Data Warehouse (EDW) in Year 2 by upgrading the hardware platform to expand capacity and improve performance. Stakeholder feedback indicated that the new hardware platform and other upgrades dramatically improved system performance. The State reports that these capacity improvements will enable the system to handle future upgrades and potentially promote wider educator use of the system.

Accessing and using State data

As noted earlier, Massachusetts and Ohio are jointly procuring a vendor to develop a teaching and learning system, called "Edwin Teaching and Learning" in Massachusetts. The States completed the requirements for the system and were in the final stages of selecting a vendor at the end of Year 2. Edwin will provide access to a digital resource library, model curriculum units, and CEPAs. It will also enhance ESE's competency tracking system for vocational and technical education.

Massachusetts plans to expand educator access to data through dashboards and portals. The dashboards will display critical student-, classroom-, and school-level indicators that will support data-driven instruction. The State developed the requirements for the dashboards in Year 2 and intends to build them in Year 3.

Using data to improve instruction

Massachusetts promotes data-informed instruction by training educators on the most effective use of data. ESE trained LEAs on data analysis and use in Year 2 and employed a team of data specialists that reached out to LEAs through District and School Assistance Centers to provide further assistance.⁹ As Massachusetts continues to roll out new data system projects like Edwin and the educator data dashboards, it will provide additional training to educators. The State is developing its training strategy alongside the development of new data systems and has already identified an LEA to pilot new trainings before the data systems launch.

Successes, challenges, and lessons learned

Massachusetts is still behind in the SIF rollout, due to the serious delays the State faced in Year 1, and continued challenges in getting additional LEAs on board in Year 2. The State indicated that difficulty filling positions and maintaining project staffing levels affected progress in Years 1 and 2. In Year 2, the State continued to focus on accelerating progress in this area. The information technology (IT) program management office now has an ESE liaison to improve communication that should lead to strengthening the links between the IT staff (in the Executive Office of Education) and the ESE program office. The State also reported that IT staff reviewed the vendor contract to identify ways to promote better accountability for deliverables. One goal of the State's increased communication is to ensure that the projects are driven by the needs of the LEAs, schools, and educators. Additionally, the State indicated that it is considering how it can develop LEA capacity for data, perhaps by using an educational service agency model. The State has a commission that is considering how to build on educational collaborations to provide this support.

⁹District and School Assistance Centers help districts and their schools strategically access and use professional development and targeted assistance to improve instruction and raise achievement for all students.

Data Systems to Support Instruction

The State's effort to expand EDW capacity is ongoing. Upgrades have been made to the hardware platform to expand capacity and improve performance. The State reported that 100 percent of LEAs are using data provided by the EDW to inform instructional decisions. Additionally, the State conducted stakeholder interviews and workshops, and identified data sources for educator reports. ESE documented high-

level requirements for the educator reports and dashboards; the State plans to begin development of the educator reports and dashboards in Year 3.

The State has faced challenges in finalizing the vendor selection for Edwin Teaching and Learning, but indicated that it anticipates making the award in Year 3.

Great Teachers and Leaders

Race to the Top States are developing comprehensive systems of educator effectiveness by adopting clear approaches to measuring student growth; designing and implementing rigorous, transparent, and fair evaluation systems for teachers and principals; conducting annual evaluations that include timely and constructive feedback; and using evaluation information to inform professional development, compensation, promotion, retention, and tenure decisions. In addition, Race to the Top States are providing high-quality pathways for aspiring teachers and principals, ensuring equitable distribution of effective teachers and principals, improving the effectiveness of teacher and principal preparation programs, and providing effective supports to all educators.

Improving teacher and principal effectiveness based on performance

Educator evaluation

In Year 2, Race to the Top participating LEAs prepared for implementation of new educator evaluation systems for instructional leaders and teachers based on BESE regulations. Participating LEAs are expected to implement new evaluation systems in SY 2012-2013, and all other LEAs in the State are expected to implement in SY 2013-2014. All LEAs must submit an educator evaluation plan for approval by ESE prior to implementation.

The State released a model educator evaluation system in January 2012 that aligns with the BESE regulations, called the Massachusetts Model System for Educator Evaluation (Model System). LEAs have the option to adopt this system, adapt it, or develop their own in alignment with the regulations. LEA-developed systems must clearly differentiate educators based on four performance levels and aid in connecting educators to appropriate professional development. To support LEAs that intend to develop their own systems, ESE released the Educator Evaluation Review Questionnaire, which it designed to help LEAs assess whether a system meets the requirements. Also as part of the preparation for the new systems, in Year 2, the State began developing data systems to accurately link teacher and student data.

Through the RSN, Massachusetts participated in several interstate webinars to discuss potential solutions for assessing student growth and measuring it in non-tested grades and subjects. ESE planned to establish LEA exemplars for measuring growth in non-tested subjects

and implement student performance measures for non-MCAS subjects (also known as the district-determined measures); however, the State determined that it needed to release guidance on district-determined measures prior to collecting exemplars. ESE released the guidance in August 2012, and plans to collect the exemplars in Year 3.

As LEAs implement their new educator evaluations, the State will monitor collective bargaining progress, as well as LEAs' adoption of and adjustment to new systems. Massachusetts has indicated that some LEAs will likely have difficulty finalizing collective bargaining agreements in time for implementation. To assist LEAs in the collective bargaining process, the State collaborated with many individuals and organizations, including the American Federation of Teachers, Massachusetts, the Massachusetts Association of School Committees, the Massachusetts Association of School Personnel Association, the Massachusetts Association of School Superintendents, the Massachusetts Secondary School Administrators Association, and the Massachusetts Teachers Association, to develop model contract language. According to the State, LEA feedback on the model language and other materials has been positive.

Massachusetts paired the Model System with extensive resources to assist with implementation, including facilitator guides and rubric guidance. The State will use the results of the Educator Evaluation Review Questionnaire to highlight successful approaches for LEAs in designing and implementing new evaluation systems. ESE also finalized a document that provides specific guidance on evaluating teachers of English learners and began developing a document that will provide specific guidance on evaluating teachers of students with disabilities.

Great Teachers and Leaders

ESE conducted trainings that support participant-wide implementation of new evaluation systems. Regional “Getting Started” workshops, attended by more than 1,000 LEA and school leaders, focused on the Model System and helped LEAs determine which components of the Model System to adopt. Other training included workshops in partnership with the Massachusetts Association of School Superintendents. ESE also assisted LEAs in creating implementation trainings for educators and evaluators. It released a list of approved vendors for such trainings and will share the cost with LEAs.

A total of 45 LEAs, including Level 4 districts and early adopter LEAs, implemented a pilot of the educator evaluation framework in Year 2. Massachusetts incorporated feedback from the pilot program into the design of the Model System, and ESE intends to use the evaluation vendor’s report on the pilot program to support LEAs that have yet to fully implement a new educator evaluation system.

Percentage of teachers in participating LEAs with qualifying evaluation systems who were evaluated as effective or better or ineffective in the prior academic year



For State-reported context, please refer to the Race to the Top APR at www.rtt-apr.us.

Additionally in Year 2, the State expanded the Superintendent Induction program from Level 3 and Level 4 district superintendents to all new superintendents. Programming for the second cohort began in summer 2011, and in November 2011 the State expanded the program to include a focus on supervision, evaluation, and

human capital development. The State assumed a greater share of the cost of the program to promote participation among Level 1 and Level 2 districts. Of the 26 participants in the second cohort, 18 are from Level 1 or Level 2 districts. The State reported that it has received positive feedback about the coaching element of the program; more specifically, the State reported that both coaches and those who have experienced coaching have realized professional growth through participation in the program.

Human capital management

The BESE revised educator licensure regulations in the State to take into account educator performance. BESE’s new performance-based licensure regulations, passed in December 2011, outline new educator preparation standards and align with new administrative leadership evaluation standards. Massachusetts developed a teacher licensure assessment system in Year 2 and intends to pilot the system in Year 3. The State finalized a contract for the development of a principal licensure performance assessment in August 2012.

Massachusetts also created a pilot program to improve LEA human resources systems so that they are more efficient and more supportive of educator effectiveness than existing systems. The State awarded grants to three LEAs to pilot new human resources systems; a technical assistance vendor will create a human resources reform toolkit based on this work. Massachusetts aims to use this work to create models for human resources systems that have an impact on the effectiveness of the educator workforce.

Ensuring equitable distribution of effective teachers and principals

ESE monitored the distribution of effective educators through the Education Personnel Information Management System (EPIMS) and Teacher Effectiveness Quality Improvement Plan (TEQIP) data systems. ESE collected data through these systems in each of the Race to the Top grant’s first two years. In Year 2, ESE added a tool to the EPIMS and TEQIP data systems to collect educator evaluation ratings from the LEAs that implemented the educator evaluation framework in SY 2011-2012. Modifications to the system will enable these data systems to collect educator effectiveness data from all LEAs in Year 3. These data will inform the State’s analysis of the equitability of teacher and principal distribution.

Massachusetts also gathered information on the status of its educator workforce through the Teaching, Empowering, Leading and Learning in Massachusetts (TELL Mass) survey, a statewide educator survey supported by Race to the Top funds. Massachusetts stated that the survey informed its efforts to recruit and retain effective teachers by providing information about teaching and learning conditions, which helped the State develop concrete plans to address specific issues.

Great Teachers and Leaders

Improved recruitment is a key part of Massachusetts' strategy to make its teacher distribution more equitable. In Year 2, ESE hired a contractor to integrate the aMAzing Teachers website, which recruits teachers specifically for low-performing schools, with the State's existing educator recruitment website. Massachusetts intends to develop a single website that serves as a gateway for educator preparation programs, licensure, and career ladder information. To ensure that this effort meets the needs of LEAs, the State solicited feedback from human resources personnel and other users of the existing tools. ESE created a test site in Year 2 and will continue to refine it during Year 3.

The State also funded two key initiatives that promote educator leadership and professional development: instructional leadership training through the National Institute for School Leaders (NISL) and National Board for Professional Teaching Standards (National Board) certification for teachers in high-needs schools. Each initiative emphasizes participation of educators from Level 3 and 4 districts. In Year 2, 230 educators participated in NISL training, and several more cohorts will begin in Year 3. Participation in the National Board project to date has been lower than expected, but the State is developing a communication plan to raise awareness of the programs in Levels 3 and 4 districts and aims to have 200 educators from high-need schools obtain National Board certification by the end of Year 4.

Improving the effectiveness of teacher and principal preparation programs

Massachusetts strengthened educator preparation program approval requirements in Year 2, through new regulations, passed in June 2012. To develop and refine the regulations, the State solicited feedback from stakeholders such as professional organizations and educator preparation programs.

In Year 2, the State developed requirements for a new web-based reporting system that will hold educator preparation programs publicly accountable for their performance. The system will track licensure candidates from program enrollment through their eventual employment in an LEA. In Year 3, Massachusetts intends to develop and release educator preparation program report cards.

To scale up effective teacher and principal preparation programs, Massachusetts released an application for grants to support expansion of proven models of success in recruiting and preparing effective teachers. These grants were planned to be made in Year 2, but will now be made in Year 3. The State indicated that it could not finalize requirements for the expansion grants until after it passed its new educator preparation regulations.

Providing effective support to teachers and principals

ESE began working to improve its vetting of professional development in order to promote effective support of educators. The State solicited feedback from numerous stakeholders as part of its revision to the Massachusetts Standards for Professional Development and selected the Standard Assessment Inventory survey to gain information on professional development quality throughout the State. Revised standards were approved in September 2012. The standards provide a foundation for a statewide professional development system that will be developed in Years 3 and 4.

To ensure that all of its resources work toward common goals, Massachusetts is aligning its professional development with Race to the Top objectives. As part of this process, ESE reviewed current professional development offerings and educator completion rates by content area and used its summer professional development institutes to focus on helping educators understand and implement the CCSS and take part in new educator evaluation systems.

In addition to its NISL training, Massachusetts implemented two educator mentoring programs in Year 2: the Superintendent Induction Program and online courses for mentors of teachers of English as a Second Language, special education, and STEM content. Massachusetts expanded the Superintendent Induction Program from Level 3 and Level 4 districts to all districts in Year 2. ESE reported that participant feedback about the program was positive. Fifty-eight educators participated in the online mentoring program in Year 2, and ESE expects about 150 to participate in Year 3.

Successes, challenges, and lessons learned

Massachusetts made substantial progress toward ensuring that all of its participating LEAs implement a rigorous educator evaluation system in SY 2012-2013 that supports instructional improvement. The State released the Model System along with guidance for LEA-developed evaluation systems and collective bargaining negotiations. ESE's extensive educator outreach included regional "Getting Started" workshops that were attended by more than 1,000 educators.

Forty-five Massachusetts LEAs piloted the State's educator evaluation framework in Year 2. The State incorporated feedback from the pilot into the Model System and continued to use the lessons from the pilot to guide its assistance and outreach to LEAs. ESE reported in October 2012 that 73 LEAs had ratified collective bargaining agreements to implement new evaluation systems and had ESE-approved evaluation system plans; 15 charter LEAs also had ESE-

Great Teachers and Leaders

approved evaluation system plans. Additionally, 26 LEAs reported that they had a tentative collective bargaining agreement. The low number of finalized collective bargaining agreements could have a significant impact on the implementation of the educator evaluation system in Year 3.

Beyond educator evaluations, the State supported educator effectiveness by working to develop new performance-based standards for teacher and leader certification. Massachusetts also awarded three grants to pilot innovative human resources systems. The State laid the groundwork to hold educator preparation programs accountable for their performance, passing strengthened regulations and working to develop a new web-based reporting system. The implementation of instructional leadership and mentoring programs such as NISL, the Superintendent Induction Program, and the online mentoring program further promoted effective instructional practice and leadership.

The State has faced some delays in other projects in this area. For instance, Massachusetts is not on track to meet its goals to expand the number of teachers with a National Board Certification. Although the State's goal was to have 200 educators in high-needs schools obtain National Board Certification by the end of the grant period, only eight educators were participating in this project. Only 34 candidates were enrolled in the STEM-focused educator preparation site (UTeach), against a target of producing 250 new STEM teachers through the program by the end of the grant period (see *Emphasis on Science, Technology, Engineering and Mathematics*). The absence of a State professional development director delayed many Year 2 professional development initiatives; however, the State hired a new director in November 2011, which, according to the State, allowed for a greater focus on such efforts.

Turning Around the Lowest-Achieving Schools

Race to the Top States are supporting LEAs' implementation of far-reaching reforms to turn around lowest-achieving schools by implementing one of four school intervention models.¹⁰

Intervening in the lowest-achieving schools

Implementing intervention models

Persistently lowest-achieving (PLA) schools¹¹ in Massachusetts continued their efforts to improve student performance, targeting the core conditions identified by the State as impacting student success. In Year 2, the State completed site visits to all 34 Level 4 schools. The State reports that LEAs have found the reviews helpful in identifying action steps for improvement.

The State reported that 34 schools that initiated one of the four school intervention models in SY 2010-2011 continued implementation in SY 2011-2012 (one school was closed in alignment with the school closure model). In November 2011, Massachusetts announced that the BESE declared Lawrence Public

Schools a Level 5 district and in January 2012 appointed a receiver to manage the district. The district will receive intensive support to support improved student achievement.

In Year 2, ESE's review process gauged each Level 4 school's baseline conditions for effectiveness, examined their progress on their redesign programs, assessed the LEAs' support systems, and helped the school determine next steps for improvement. Based on these reviews, the State produced an emerging practices report that has guided efforts to improve LEA capacity. ESE's LEA capacity efforts focused on strengthening human resource systems (especially educator evaluation) and instituting project management structures that facilitate swift and effective identification of urgent priorities. Six Level 4 districts that faced especially great implementation challenges received assistance from District Plan Managers, who reported directly to the LEA superintendent.

¹⁰Race to the Top States' plans include supporting their LEAs in turning around the lowest-achieving schools by implementing one of the four school intervention models:

- **Turnaround model:** Replace the principal and rehire no more than 50 percent of the staff and grant the principal sufficient operational flexibility (including in staffing, calendars/time and budgeting) to fully implement a comprehensive approach to substantially improve student outcomes.
- **Restart model:** Convert a school or close and reopen it under a charter school operator, a charter management organization, or an education management organization that has been selected through a rigorous review process.

- **School closure:** Close a school and enroll the students who attended that school in other schools in the district that are higher achieving.

- **Transformation model:** Implement each of the following strategies: (1) replace the principal and take steps to increase teacher and school leader effectiveness, (2) institute comprehensive instructional reforms, (3) increase learning time and create community-oriented schools, and (4) provide operational flexibility and sustained support.

¹¹ESE identifies the PLA schools based on the State's accountability rating system. ESE selects Level 4 schools from among the lowest-performing 20 percent of schools in the State based on high school graduation rates and student performance improvement. Schools that demonstrate the least improvement receive the Level 4 designation. In turn, Level 4 schools that fail to reach improvement benchmarks after three or more years receive Level 5 status, which results in management by ESE or a designated partner. The State also may designate a school district as chronically underperforming, resulting in the designation of a Level 5 district. All schools designated as Level 4 must implement an intervention plan, which needs to be aligned with the principles presented in the State's approved ESEA flexibility request. Level 4 schools that successfully apply for School Improvement Grant funding must implement one of the four school intervention models.

Turning Around the Lowest-Achieving Schools

ESE found that many LEAs needed support in developing strong governance practices. As a result, the State began working to improve school governance, in collaboration with the Massachusetts Association of School Committees, in 17 Level 3 and Level 4 districts. In Year 2, this project produced drafts of five modules on improving school governance, as well as an online data resource for sharing information and ideas.

Promoting student achievement in low-performing schools

In Year 2, Massachusetts also promoted reform of low-achieving schools through Wraparound Zone grants. Wraparound Zone schools created proactive systems for identifying academic and non-academic student needs, offered customized and multi-faceted interventions to at-risk students, connected social workers and families to school practices, and monitored the effectiveness of their programs. Participating LEAs submitted plans to the State that describe how they would accomplish these goals and make progress in other improvement areas.

Twenty-one schools in five LEAs implemented Wraparound Zones in Year 2. In support of these schools, the State's technical assistance vendor and Wraparound Zone coordinator conducted monthly technical assistance visits, and the State conducted mid-year monitoring and progress assessments. An evaluation vendor collected baseline data and provided feedback to the State and LEAs on progress. Wraparound Zone LEAs collaborated with one another through monthly cross-district coordinator meetings, calls, and peer learning exchanges.

To promote high-quality instruction in low-performing schools, Massachusetts trains and deploys teams of teachers and leaders who specialize in boosting student performance. Turnaround Teacher Teams and Turnaround Leader Teams recruit, train, place, and support both new and experienced educators in Level 3 and 4 schools. During the first two years, the State trained 22 leaders through the programs, and expects to place more than 200 of the trained teachers in low-performing schools in the next two school years.

ESE identifies and pre-approves Priority Partners to help Levels 3, 4, and 5 schools accelerate school improvement. Priority Partners pass through a thorough State vetting process that ensures that each has a proven ability to accelerate school improvement. Priority Partners specialize in three areas: Addressing Students' Social, Emotional and Health Needs; Leadership, Human Resources, and Financial Management; and Maximizing Learning Time.

In Year 2, ESE expanded its network from seven Priority Partners to 24 and expanded access from Level 4 LEAs alone to include Level 3 LEAs and the recently identified Level 5 LEA. The State created an Investment Fund to support partnerships between Priority Partners and LEAs and created the Network of Priority Partners, which convenes quarterly to facilitate collaboration between

Using innovative funding models to support low-performing schools

In the City of Lawrence, Massachusetts, a collaborative funding model for Turnaround Teacher Teams splits costs among the LEA, the State, and private funders. The State and Lawrence contribute to the general operating support for the organization and costs associated with recruiting, selecting, training and supporting up to 50 aspiring teachers in Lawrence. The State and Lawrence each contribute one quarter of the total cost. Funds from private organizations account for one half of the total project cost. This funding model makes it possible for schools in Lawrence to leverage a pipeline of specially trained educators who have the potential to dramatically increase student achievement.

Priority Partners within and among LEAs. ESE intends to evaluate all Priority Partners annually to hold them accountable and will monitor progress of all Investment Fund recipients quarterly.

Massachusetts shared its practices with other Race to the Top States through the School Turnaround Community of Practice. In addition, Massachusetts contributed to an RSN publication that described the State's Essential Conditions for School Effectiveness. Further, State representatives led a webinar for other State teams in April 2012 that focused on sharing promising practices relating to Priority Partners.

Successes, challenges, and lessons learned

Massachusetts continued to build on its successes in supporting PLA and other low-performing schools. The State reported that, of the 34 schools that were implementing one of the four school intervention models in SY 2011-2012, 25 schools improved the percentage of students scoring proficient or higher (all grades combined) by three or more percentage points in ELA between 2010 and 2012, and 22 schools improved on the same measure by three or more percentage points in mathematics. In addition, some schools made even more significant gains. For example, seven schools improved the percentage of students scoring proficient or higher (all grades combined) by 15 percentage points or more over the past two years. The State did not initiate school intervention models in any new schools in SY 2011-2012.

The State's Turnaround Teacher and Leader Teams initiatives advanced more rapidly than anticipated in the State's plans. The network of Priority Partners expanded in Year 2, providing low-performing schools with a greater pool of high-quality partners for LEA improvement, and the State's Investment Fund ensured that LEAs were able to use those partners to address high need areas.

Emphasis on Science, Technology, Engineering, and Mathematics (STEM)

State's STEM initiatives

Massachusetts' STEM Early College High Schools improve access to STEM courses and resources among traditionally underrepresented groups through LEAs' partnerships with colleges and universities that offer high school students the opportunity to earn 12 to 30 college credits in STEM fields. Massachusetts launched one STEM Early College High School in Year 2, and began the planning process for opening five others.

The State's STEM-focused educator preparation site, UTeach, enrolled 34 candidates in Year 2. Massachusetts aims to produce 250 new STEM teachers through the program by the end of the grant. Based on current enrollment figures, the State faces a challenge in meeting this goal.

State efforts to promote college and career readiness through enhanced standards in Year 2 also promoted a focus on STEM disciplines. The State reported that LEAs have engaged in locally-driven initiatives to improve the percentage of students completing MassCore, a rigorous diploma track designed to promote college and

career readiness that requires high school students to take at least three years of lab-based science coursework and at least four years of mathematics. The State also supported higher STEM standards through its pre-AP training program, which helped more than 1,000 teachers between fall 2011 and fall 2012 learn how to prepare students for AP courses (see *Standards and Assessments*).

Successes, challenges, and lessons learned

Massachusetts will leverage lessons learned from the school that implemented the STEM Early College High School program in Year 2 to support the schools that will implement the program in Year 3. The State faced challenges in enrolling teachers in the UTeach program, but initiated efforts to improve its outreach strategy. In Year 3, the State plans to boost UTeach enrollment and continue engaging educators in pre-AP training, which has garnered positive feedback.

Progress Updates on Invitational Priorities

In its SY 2011–2012 APR, Massachusetts reported the following progress:

Innovations for improving early learning outcomes

In December 2011, Massachusetts was awarded a Race to the Top – Early Learning Challenge grant. The State's Race to the Top – Early Learning Challenge plan is designed to ensure that all children have access to high-quality pre-kindergarten education, through initiatives such as providing support to early childhood educators to improve their practice, creating the Massachusetts Early Learning and Development Assessment System, and increasing engagement with parents, families, and community members.

In keeping with the State's commitment to increasing coherence and alignment across the education continuum, and in order to leverage expertise and resources across sectors, Massachusetts Governor Deval Patrick signed legislation (H 4243) on September 26, 2012 creating an expert literacy panel to provide recommendations on how to improve the reading abilities of third graders in Massachusetts.

ESE worked collaboratively with the Department of Early Education and Care (EEC) on developing a birth to grade three framework. The framework is aimed at addressing third grade reading scores by aligning practices across the birth to age five system of early childhood services and the kindergarten through third grade (K-3) system of early elementary services. It addresses

both the vertical and horizontal elements of: instructional tools and practices; data and assessment; instructional environment; engaging families; administrators and leadership quality; transition and pathways; teacher quality and capacity; and mechanisms for cross-sector alignment.

When the State adopted the new Massachusetts Curriculum Frameworks incorporating CCSS, it used the flexibility to add 15 percent State-specific content to include standards for pre-kindergarten in both ELA and mathematics. The curriculum and instruction materials being developed for the State's teaching and learning system includes materials for K–3 in all four core subjects (ELA, mathematics, history/social studies, and science) and supplemental ELA materials for grades two and three.

ESE is partnering with EEC to plan for the future development of Early Warning Indicator System (EWIS) data for early education sites. As of September 2012, EWIS data are now available for grades one through 12 statewide, which includes aggregate and student-level reports that identify students who are at risk of falling off track based on their academic level. The EWIS risk models were developed in partnership with a contracted partner, the American Institutes for Research. The EEC-level EWIS would mirror the elementary and secondary level-EWIS, providing risk level information on children from birth through kindergarten. Collecting and preparing EWIS data was ongoing throughout the period of July 1, 2011 to June 30, 2012, and the data were formally released to LEAs and schools at the end of September 2012.

Progress Updates on Invitational Priorities

ESE is partnering with EEC to include a School Readiness component within the preschool through college (P-20) Longitudinal Data System. The two Departments are currently working to develop the data and reporting requirements to provide educators from both Departments with information that will help improve the educational outcomes of young children who are high needs. The data are scheduled to be available to LEAs in the spring of 2013.

Expansion and adaptation of statewide longitudinal data systems

ESE has designated data systems as one of its six priority projects that will guide the work of the agency through its strategic planning delivery process. A core team developed the following aspiration for the agency: “To provide tools along with a technical and cultural environment that informs policies and decisions to support effective data use towards improving student achievement.”

On October 21, 2011, EEC, ESE, and the Department of Higher Education (DHE) signed a data sharing agreement with the Executive Office of Education that serves as the basis for the Family Educational Rights and Privacy Act compliant P-20 database. Since that time, the agencies have begun assigning State Assigned Student Identifiers (SASIDs) under this agreement. In November 2012, college feedback reports resulting from this data exchange were released to agency and LEA users. In addition to the agencies listed above, the State also began the process of assigning SASIDs to the Adult Basic Education community. As of September 20, 2012, the data system has been populated with approximately 133,000 SASIDs.

Version 3.0 of the Education Data Warehouse has been in place for the past school year. Powered by an Exadata storage server, the new version has succeeded in correcting many of the inefficiencies and performance issues of prior versions. On the day that State assessment results were released, a record number of reports (17,333) were run without any performance issues.

The SIF project is ready to move into phase two. Over 100 LEAs are sending data on a near-real time basis to ESE and a pilot set of nine LEAs certified their Student Information Management System (SIMS) data through the SIF protocol in the end of year SIMS collection. In October 2012, the State attempted to certify the SIMS collection of the remaining LEAs and pilot the Student Course Schedule collection with a small number of LEAs.

P-20 coordination, vertical and horizontal alignment

ESE is continuing to work collaboratively with the EEC to develop a birth to grade three framework for enhancing developmental and learning outcomes for all children in Massachusetts. This framework is focused on improving third grade reading scores (as measured by the MCAS) by better aligning policies and practices across the birth to age five system of early childhood services and the K–3 system of early elementary services. ESE and EEC are increasing both vertical and cross-sector alignment by addressing issues related to instructional tools and practices, data and assessment, instructional environments, family engagement, the quality of leaders and administrators, teacher quality, and professional pathways for early educators.

Each of the six Readiness Centers hosted regional events during the spring of 2012 to provide educators from early education, elementary and secondary education, and higher education with additional guidance regarding the implementation of the Curriculum Frameworks in ELA and Mathematics. The sessions included ESE staff member presentations on a wide array of guidance materials, and small group sessions that were facilitated by regional educators. Attendees also received additional resources and tools that they could share with their colleagues to not only introduce, but embed the new standards in educational institutions across the State. ESE is working with the Executive Office of Education (EOE) and the Readiness Centers to plan additional training events for SY 2012-2013.

ESE is continuing to work with the EOE, EEC, and DHE to establish a P-20 database and share information across State education entities. Additionally, representatives from DHE and Massachusetts public institutions of higher education are participating in ongoing discussions about the implementation of key Race to the Top initiatives (including educator evaluation, the Curriculum Frameworks in ELA and mathematics, and PARCC) and their relationship to college readiness, student assessment, educator preparation and licensure, and increasing alignment between high schools and public institutions of higher education.

School-level conditions for reform, innovation, and learning

In 2010, the State passed education reform legislation that provides new tools, rules, and supports to accelerate the improvement of low-performing schools in Massachusetts. The law gives local superintendents and the Commissioner of Elementary and Secondary Education the ability to increase flexibility in these schools, such as by adding budgetary flexibility; increased planning time for teachers; and bonuses and other awards to attract and retain high-quality teachers. The law also requires that turnaround plans incorporate comprehensive services for high-need students and their families and strategies to engage families and communities in supporting student academic success.

Progress Updates on Invitational Priorities

In 2011, one year after the legislation's implementation, each of the Level 4 schools used one or more of these provisions. The alignment of the new autonomies in the reform legislation with the elements of the four federal SIG school intervention models is providing an extra incentive for schools to use these autonomies. The most commonly

used provisions of the reform legislation include increased planning time for teachers, longer school days for students, comprehensive wraparound services to address students' non-academic barriers to learning, and new strategies to engage families and communities in supporting student academic success.

Looking Ahead to Year 3

The State's progress during the first two years of its Race to the Top grant laid the foundation for implementation of several key initiatives in Year 3 that aim to improve education in the State by setting high expectations for both teachers and students. All LEAs in Massachusetts will implement the State's new standards, and the State expects that all Race to the Top participating LEAs will implement rigorous educator evaluation systems in Year 3.

As the State implements these critical initiatives, it will continue to build resources, professional development, and data system capacity to support educator effectiveness and improved student performance. The State's teaching and learning system, Edwin Teaching and Learning, and the SIF will bring the State closer to its goal of providing teachers with real-time, high-quality data to inform instruction. ESE will continue to develop, pilot, and refine curricular materials to support educators' implementation of the new standards.

The State will also provide further guidance on measuring student growth and support LEAs as they continue training educators who will conduct observations for the new educator evaluation systems.

Massachusetts' initiatives are expected to improve educator effectiveness through high-quality educator training and higher licensure standards. Several additional NISL cohorts will begin in Year 3, and the State expects to train and support more than 200 teachers as part of Turnaround Teacher Teams. New licensure regulations and teacher preparation accountability measures will hold training programs to a high standard. The State will pilot new licensure assessments in Year 3.

ESE will continue to support school innovation and improvement in low-performing schools. Wraparound Zones, Priority Partners, and school intervention models will help these schools achieve higher standards. Additionally, three STEM Early College High Schools opened in Year 3, offering students new and innovative ways to engage with high-quality content and instruction.

Budget

For the State's expenditures through June 30, 2012, please see the APR at www.rtt-apr.us.

For State budget information, see <http://www2.ed.gov/programs/racetothetop/state-scope-of-work/index.html>.

For the State's fiscal accountability and oversight report, please see <http://www2.ed.gov/programs/racetothetop/performance.html>.

Glossary

Alternative routes to certification: Pathways to certification that are authorized under the State's laws or regulations that allow the establishment and operation of teacher and administrator preparation programs in the State, and that have the following characteristics (in addition to standard features such as demonstration of subject-matter mastery, and high-quality instruction in pedagogy and in addressing the needs of all students in the classroom including English learners and students with disabilities): (a) can be provided by various types of qualified providers, including both institutions of higher education and other providers operating independently from institutions of higher education; (b) are selective in accepting candidates; (c) provide supervised, school-based experiences and ongoing support such as effective mentoring and coaching; (d) significantly limit the amount of coursework required or have options to test out of courses; and (e) upon completion, award the same level of certification that traditional preparation programs award upon completion.

Amendment requests: In the event that adjustments are needed to a State's approved Race to the Top plan, the grantee must submit an amendment request to the Department for consideration. Such requests may be prompted by an updated assessment of needs in that area, revised cost estimates, lessons learned from prior implementation efforts, or other circumstances. Grantees may propose revisions to goals, activities, timelines, budget, or annual targets, provided that the following conditions are met: the revisions do not result in the grantee's failure to comply with the terms and conditions of this award and the program's statutory and regulatory provisions; the revisions do not change the overall scope and objectives of the approved proposal; and the Department and the grantee mutually agree in writing to the revisions. The Department has sole discretion to determine whether to approve the revisions or modifications. If approved by the Department, a letter with a description of the amendment and any relevant conditions will be sent notifying the grantee of approval. (For additional information please see <http://www2.ed.gov/programs/racetothetop/amendments/index.html>.)

America COMPETES Act elements: The twelve indicators specified in section 6401(e)(2)(D) of the America COMPETES Act are: (1) a unique statewide student identifier that does not permit a student to be individually identified by users of the system; (2) student-level enrollment, demographic, and program participation information; (3) student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 education programs; (4) the capacity to communicate with higher education data systems; (5) a State data audit system assessing data quality, validity, and reliability; (6) yearly test records of individual students with respect to assessments under section 1111(b) of the ESEA (20 U.S.C. 6311(b)); (7) information on students not tested by grade and subject; (8) a teacher identifier system with the ability to

match teachers to students; (9) student-level transcript information, including information on courses completed and grades earned; (10) student-level college-readiness test scores; (11) information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework; and (12) other information determined necessary to address alignment and adequate preparation for success in postsecondary education.

American Recovery and Reinvestment Act of 2009 (ARRA): On February 17, 2009, President Obama signed into law the ARRA, historic legislation designed to stimulate the economy, support job creation, and invest in critical sectors, including education. The Department of Education received a \$97.4 billion appropriation.

Annual Performance Report (APR): Report submitted by each grantee with outcomes to date, performance against the measures established in its application, and other relevant data. The Department uses data included in the APRs to provide Congress and the public with detailed information regarding each State's progress on meeting the goals outlined in its application. The final State APRs are found at www.rtt-apr.us.

College- and career-ready standards: State-developed standards that build toward college and career readiness by the time students graduate from high school.

Common Core State Standards (CCSS): Kindergarten through twelfth grade (K-12) English language arts and mathematics standards developed in collaboration with a variety of stakeholders including States, governors, chief State school officers, content experts, teachers, school administrators, and parents. The standards establish clear and consistent goals for learning that will prepare America's children for success in college and careers. As of December 2011, the CCSS were adopted by 45 States and the District of Columbia.

The **education reform areas** for Race to the Top: (1) Standards and Assessments: Adopting rigorous college- and career-ready standards and assessments that prepare students for success in college and career; (2) Data Systems to Support Instruction: Building data systems that measure student success and support educators and decision-makers in their efforts to improve instruction and increase student achievement; (3) Great Teachers and Great Leaders: Recruiting, developing, retaining, and rewarding effective teachers and principals; and (4) Turning Around the Lowest-Achieving Schools: Supporting LEAs' implementation of far-reaching reforms to turn around lowest-achieving schools by implementing school intervention models.

Effective teacher: A teacher whose students achieve acceptable rates (*e.g.*, at least one grade level in an academic year) of student growth (as defined in the Race to the Top requirements). States, LEAs,

or schools must include multiple measures, provided that teacher effectiveness is evaluated, in significant part, by student growth (as defined in the Race to the Top requirements). Supplemental measures may include, for example, multiple observation-based assessments of teacher performance.

High-minority school: A school designation defined by the State in a manner consistent with its Teacher Equity Plan. The State should provide, in its Race to the Top application, the definition used.

High-poverty school: Consistent with section 1111(h)(1)(C)(viii) of the ESEA, a school in the highest quartile of schools in the State with respect to poverty level, using a measure of poverty determined by the State.

Highly effective teacher: A teacher whose students achieve high rates (*e.g.*, one and one-half grade levels in an academic year) of student growth (as defined in the Race to the Top requirements). States, LEAs, or schools must include multiple measures, provided that teacher effectiveness is evaluated, in significant part, by student growth (as defined in the Race to the Top requirements). Supplemental measures may include, for example, multiple observation-based assessments of teacher performance or evidence of leadership roles (which may include mentoring or leading professional learning communities) that increase the effectiveness of other teachers in the school or LEA.

Instructional improvement systems (IIS): Technology-based tools and other strategies that provide teachers, principals, and administrators with meaningful support and actionable data to systemically manage continuous instructional improvement, including such activities as instructional planning; gathering information (*e.g.*, through formative assessments (as defined in the Race to the Top requirements), interim assessments (as defined in the Race to the Top requirements), summative assessments, and looking at student work and other student data); analyzing information with the support of rapid-time (as defined in the Race to the Top requirements) reporting; using this information to inform decisions on appropriate next instructional steps; and evaluating the effectiveness of the actions taken. Such systems promote collaborative problem-solving and action planning; they may also integrate instructional data with student-level data such as attendance, discipline, grades, credit accumulation, and student survey results to provide early warning indicators of a student's risk of educational failure.

Invitational priorities: Areas of focus that the Department invited States to address in their Race to the Top applications. Applicants did not earn extra points for addressing these focus areas, but many grantees chose to create and fund activities to advance reforms in these areas.

Involved LEAs: LEAs that choose to work with the State to implement those specific portions of the State's plan that necessitate

full or nearly-full statewide implementation, such as transitioning to a common set of K-12 standards (as defined in the Race to the Top requirements). Involved LEAs do not receive a share of the 50 percent of a State's grant award that it must subgrant to LEAs in accordance with section 14006(c) of the ARRA, but States may provide other funding to involved LEAs under the State's Race to the Top grant in a manner that is consistent with the State's application.

Participating LEAs: LEAs that choose to work with the State to implement all or significant portions of the State's Race to the Top plan, as specified in each LEA's agreement with the State. Each participating LEA that receives funding under Title I, Part A will receive a share of the 50 percent of a State's grant award that the State must subgrant to LEAs, based on the LEA's relative share of Title I, Part A allocations in the most recent year at the time of the award, in accordance with section 14006(c) of the ARRA. Any participating LEA that does not receive funding under Title I, Part A (as well as one that does) may receive funding from the State's other 50 percent of the grant award, in accordance with the State's plan.

The Partnership for Assessment of Readiness for College and Careers (PARCC): One of two consortia of States awarded grants under the Race to the Top Assessment program to develop next-generation assessment systems that are aligned to common K-12 English language and mathematics standards and that will accurately measure student progress toward college and career readiness. (For additional information please see <http://www.parcconline.org/>.)

Persistently lowest-achieving schools: As determined by the State, (i) any Title I school in improvement, corrective action, or restructuring that (a) 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 (b) is a high school that has had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60 percent over a number of years; and (ii) any secondary school that is eligible for, but does not receive, Title I funds that (a) 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 (b) is a high school that has had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60 percent over a number of years. To identify the lowest-achieving schools, a State must take into account both (i) the academic achievement of the "all students" group in a school in terms of proficiency on the State's assessments under section 1111(b)(3) of the ESEA in reading/language arts and mathematics combined; and (ii) the school's lack of progress on those assessments over a number of years in the "all students" group. (For additional information please see <http://www2.ed.gov/programs/sif/index.html>.)

Qualifying evaluation systems: Educator evaluation systems that meet the following criteria: 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.

Reform Support Network (RSN): In partnership with the ISU, the RSN offers collective and individualized technical assistance and resources to grantees of the Race to the Top education reform initiative. The RSN's purpose is to support the Race to the Top grantees as they implement reforms in education policy and practice, learn from each other and build their capacity to sustain these reforms.

The **School Improvement Grants (SIG)** program is authorized under section 1003(g) of Title I of the ESEA. Funds are awarded to States to help them turn around persistently lowest-achieving schools. (For additional information please see <http://www2.ed.gov/programs/sif/index.html>.)

School intervention models: A State's Race to the Top plan describes how it will support its LEAs in turning around the lowest-achieving schools by implementing one of the four school intervention models:

- **Turnaround model:** Replace the principal and rehire no more than 50 percent of the staff and grant the principal sufficient operational flexibility (including in staffing, calendars/time and budgeting) to fully implement a comprehensive approach to substantially improve student outcomes.
- **Restart model:** Convert a school or close and reopen it under a charter school operator, a charter management organization, or an education management organization that has been selected through a rigorous review process.
- **School closure:** Close a school and enroll the students who attended that school in other schools in the district that are higher achieving.
- **Transformation model:** Implement each of the following strategies: (1) replace the principal and take steps to increase teacher and school leader effectiveness, (2) institute comprehensive instructional reforms, (3) increase learning time and create community-oriented schools, and (4) provide operational flexibility and sustained support.

Single sign-on: A user authentication process that permits a user to enter one name and password in order to access multiple applications.

The **SMARTER Balanced Assessment Consortium**

(Smarter Balanced): One of two consortia of States awarded grants under the Race to the Top Assessment program to develop next-generation assessment systems that are aligned to common K-12 English language and mathematics standards and that will accurately measure student progress toward college and career readiness. (For additional information please see <http://www.k12.wa.us/SMARTER/default.aspx>.)

The **State Scope of Work:** A detailed document for the State project that reflects the grantee's approved Race to the Top application. The State Scope of Work includes items such as the State's specific goals, activities, timelines, budgets, key personnel, and annual targets for key performance measures. (For additional information please see <http://www2.ed.gov/programs/racetothetop/state-scope-of-work/index.html>.) Additionally, all participating LEAs are required to submit Scope of Work documents, consistent with State requirements, to the State for its review and approval.

Statewide longitudinal data systems (SLDS): Data systems that enhance the ability of States to efficiently and accurately manage, analyze, and use education data, including individual student records. The SLDS help States, districts, schools, educators, and other stakeholders to make data-informed decisions to improve student learning and outcomes, as well as to facilitate research to increase student achievement and close achievement gaps. (For additional information please see http://nces.ed.gov/Programs/SLDS/about_SLDS.asp.)

Student achievement: For the purposes of this report, student achievement (a) for tested grades and subjects is (1) a student's score on the State's assessments under the ESEA; and, as appropriate, (2) other measures of student learning, such as those described in paragraph (b) of this definition, provided they are rigorous and comparable across classrooms; and (b) for non-tested grades and subjects, alternative measures of student learning and performance such as student scores on pre-tests and end-of-course tests; student performance on English language proficiency assessments; and other measures of student achievement that are rigorous and comparable across classrooms.

Student growth: The change in student achievement (as defined in the Race to the Top requirements) for an individual student between two or more points in time. A State may also include other measures that are rigorous and comparable across classrooms.

Value-added models (VAMs): A specific type of growth model based on changes in test scores over time. VAMs are complex statistical models that generally attempt to take into account student or school background characteristics in order to isolate the amount of learning attributable to a specific teacher or school. Teachers or schools that produce more than typical or expected growth are said to "add value."