

REACHING WORLD-CLASS

Maryland's Race to the Top Accomplishments
2010-2014



SEPTEMBER 2014





ACKNOWLEDGEMENTS

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A MESSAGE FROM THE STATE SUPERINTENDENT OF SCHOOLS



Lillian M. Lowery, Ed.D.

State Superintendent of Schools

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Dear Citizens of Maryland,

It is with great pride that I share with you the Maryland State Department of Education's report on the return on investment from the federal Race to the Top grant. No state has invested as much, or as wisely, in education as Maryland, due in large part to our visionary Governor, Martin O'Malley, and General Assembly.

Maryland is recognized as a national leader in education, and we continue to seek ways to do more for our students and educators. When President Barack Obama and U.S. Secretary of Education Arne Duncan announced a new \$4.35 billion competitive grant program – Race to the Top (RTTT) – on July 24, 2009, Maryland chose to compete and win support for its plan to accelerate innovation and improvement in our schools. You can be proud of your schools, educators, and students for the achievements they made with support from Maryland's \$250 million RTTT grant.

Maryland's public school system has raised standards, used data to strengthen instruction, increased professional development and support for teachers and school leaders, and begun to turnaround its lowest-achieving schools. Maryland continues to be a leader in Science, Technology, Engineering, and Mathematics (STEM) education, having been the first state in the nation to set specific STEM standards that not only define what makes a STEM proficient student, but also help guide teachers' STEM instruction. STEM education is critical to ensuring that students can compete for and obtain jobs in Maryland where there is a growing demand for skilled workers to fill federal research laboratories and cybersecurity jobs. We are preparing world class students to meet the needs of local employers and compete in a global economy.

Our State's future prosperity is ensured by the growth and achievements of today's schools and students. We will continue to make the better choices that yield even better results to strengthen and grow Maryland's middle class and create a better, stronger Maryland for all our children. I hope you enjoy and share the accomplishments noted in this report, understanding Maryland can and will reach new heights in the future.

Sincerely,

A handwritten signature in black ink that reads "Lillian M. Lowery". The signature is written in a cursive, flowing style.

Lillian M. Lowery, Ed.D.

State Superintendent of Schools



RTTT grant competition announced

JULY 24, 2009



Maryland submits its RTTT application to the U.S. Dept. of Ed.

JUNE 1, 2010



Maryland wins a \$250 million RTTT grant

AUGUST 24, 2010

RACE TO THE TOP TIMELINE

BACKGROUND

Setting the Stage for Educational Excellence in Maryland

On July 24, 2009, President Barack Obama and U.S. Secretary of Education Arne Duncan [announced](#) a new \$4.35 billion competitive grant program designed

“America cannot lead in the 21st century unless we also have the best educated, most competitive workforce in the world.”

- President Barack Obama

to encourage and reward States that are creating the conditions for education innovation and reform – Race to the Top (RTTT).

The unprecedented federal RTTT program was aimed at improving education around

four main priorities, or “assurance areas”:

- Implementing college and career-ready standards and assessments
- Building robust data systems to improve instruction
- Supporting and developing great teachers and school leaders
- Turning around persistently low-performing schools

Maryland has a long and distinguished history of education reform and seized this opportunity to develop a plan that would take the State’s education system from national leader to world class status.

Maryland developed its RTTT proposal with unprecedented collaboration and transparency. To help frame its proposal, the State called upon a top-level committee of educators and State education leaders. Later, a draft application was placed on the Maryland State Department of Education (MSDE) website in January 2010 inviting commentary, and State officials held more than 80 meetings with local school systems, organizations, and teacher’s associations over the following six months. In addition, the State held 40 focus groups with teachers and principals to gain their perspective on Maryland’s proposal.

[The announcement](#) came on August 24, 2010 – Maryland had won one of the federal government’s coveted Race to the Top grants in the amount of \$250

What are “assurance areas”?

To qualify for RTTT funding, states were required to advance reforms around four specific focus areas or priorities, commonly referred to as the four assurances.

Maryland also made Science, Technology, Engineering, and Mathematics (STEM) a priority in its RTTT application; therefore, STEM initiatives are interwoven throughout each of the four assurance areas.

MARYLAND'S VISION FOR RACE TO THE TOP

million over four years.

A total of 18 states and the District of Columbia have been awarded RTTT grants. Maryland has one of the nation's most honored systems of public education for one simple reason—it does not stand still. Over the past three decades, Maryland has built a strong foundation, policy by policy, to achieve national status as a leader in educational excellence. Through it all, one thing has remained constant – Maryland's commitment to continually improving the education and achievement of all students.

Today, students face the new reality that a high school diploma is just the starting point. The expectations for what individuals need to know and be able to do in order to be successful in college and careers are changing. Our education system must also change to ensure that students graduate from high school prepared to enter post-secondary education and the workforce, without the need for remediation.

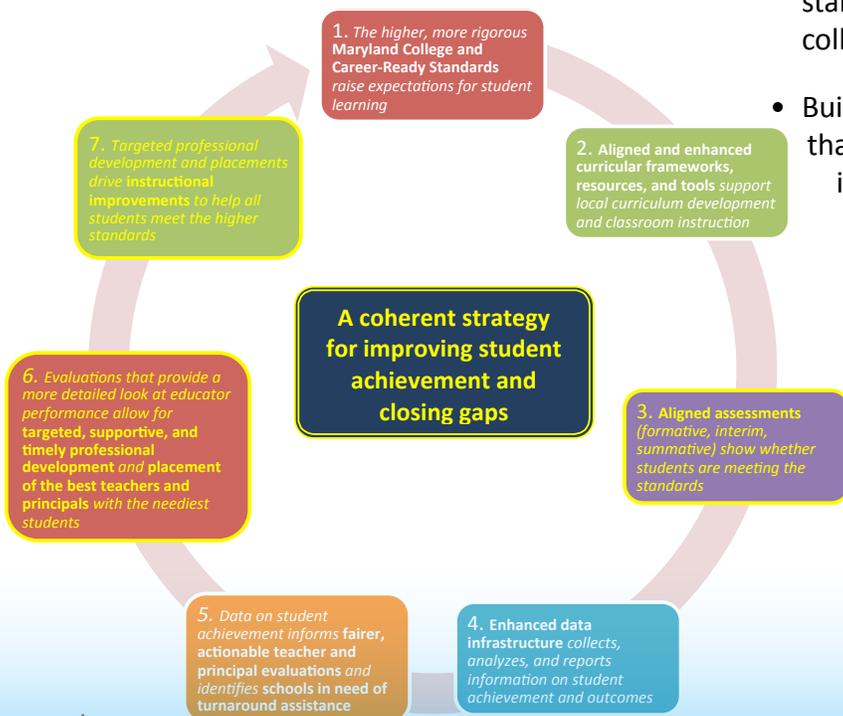
Additionally, even in a state like Maryland that is recognized as a [national leader in education](#), achievement gaps continue to exist in far too many



schools. In order to move forward, Maryland must focus on improving all levels of achievement, while ensuring that standards and expectations remain high.

Maryland drafted its [winning RTTT application](#) with these considerations in mind. The application laid out the State's robust plan to move its education system from national leader to world class, setting an ambitious agenda, focused on improving education by:

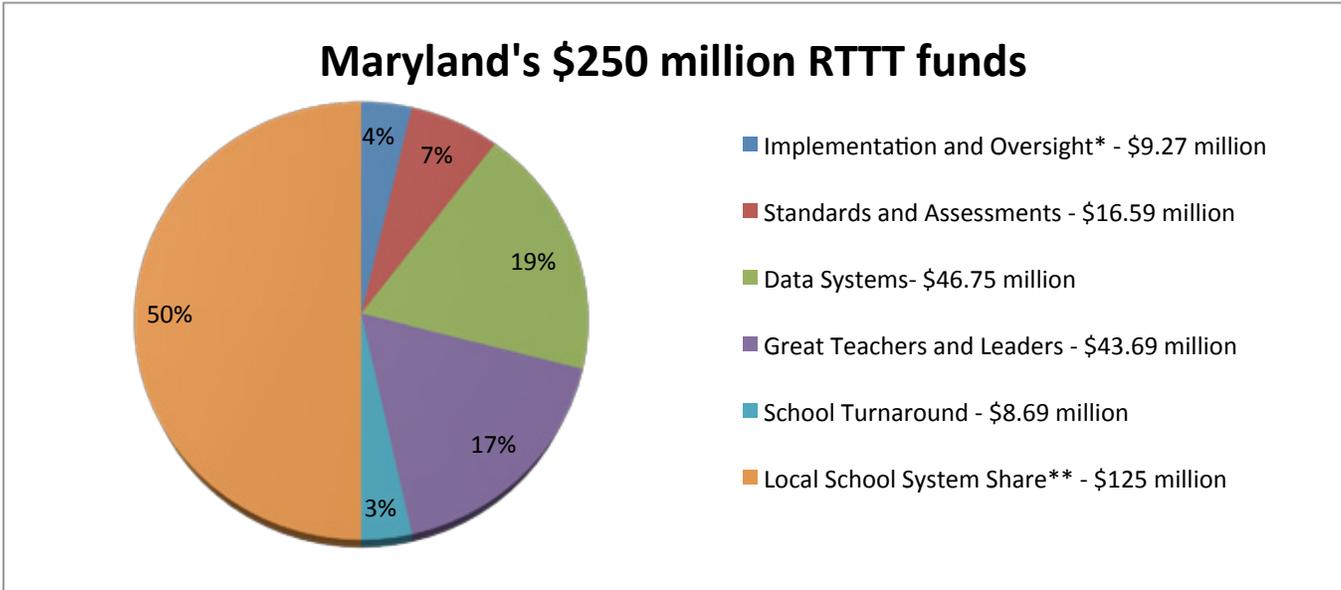
- Implementing higher, more rigorous standards and advanced assessments aligned to those new standards to help prepare students for success in college and careers
- Building a statewide technology infrastructure that links all data elements with analytic and instructional tools to monitor and promote student achievement
 - Redesigning the model for teacher and principal evaluations, with a focus on preparation, development, and retention
 - Fully implementing the innovative Breakthrough Center approach for turning around the State's lowest-performing schools



MARYLAND'S RTTT BUDGET BY THE NUMBERS

Maryland was awarded \$250 million through Race to the Top. Winning states were required to provide 50 percent of their grant funds to participating school

systems to support local RTTT-aligned projects. The other went to fund state-level initiatives. This chart illustrates how Maryland's funds were allocated.



*****Implementation and Oversight – this includes Maryland's oversight of the RTTT grant and program evaluation
******Local School System Share – the terms of the RTTT grant state that 50 percent of a state's awarded funds must be distributed to participating school systems to support their local reform efforts

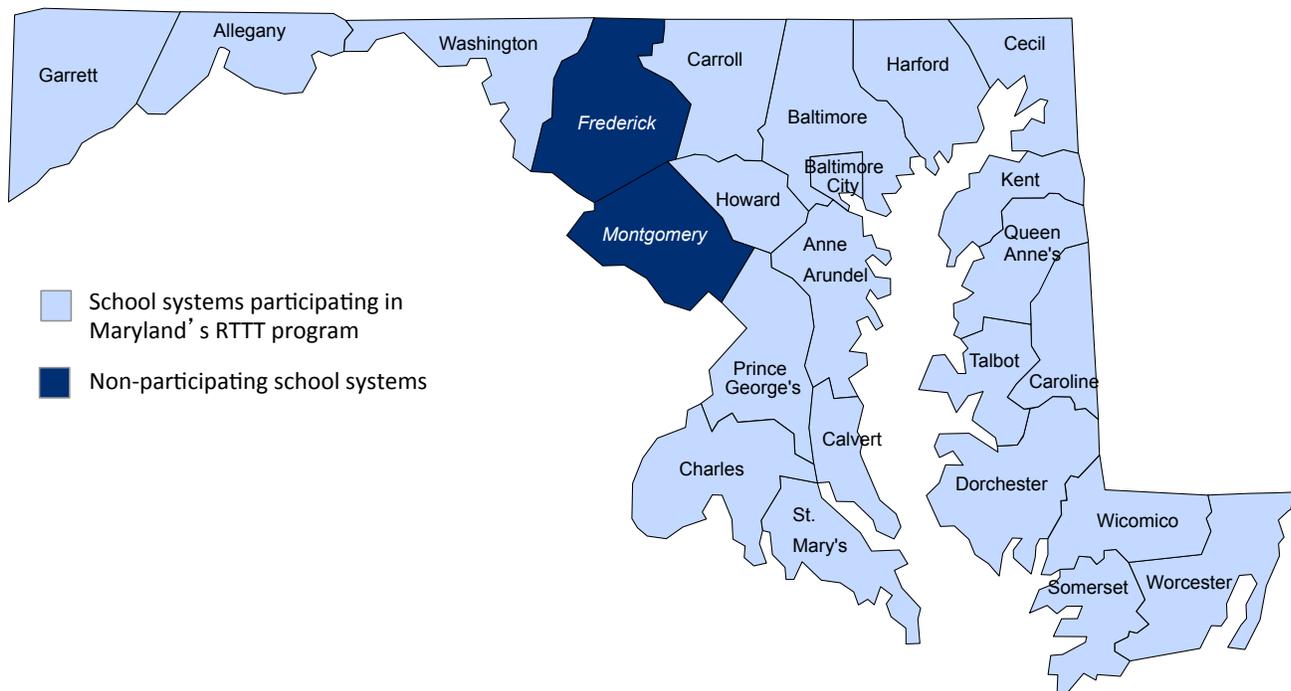


LOCAL SCHOOL SYSTEM PARTICIPATION

To impact student learning, it is critical that the State’s reforms reach every classroom in every school in Maryland. Therefore, the successful implementation of these initiatives requires that teachers receive ample training and support from both the State and their local school system. Throughout Race to the Top, MSDE has worked closely with local school systems to help ensure that this happens.

Twenty-two of Maryland’s 24 local school systems signed-on to participate in the State’s RTTT program. Although the two remaining systems, Frederick

County Public Schools and Montgomery County Public Schools, are not fully participating in RTTT, they are involved in many aspects of the work, including implementation of the Maryland College and Career-Ready Standards, the Partnership for Assessment of Readiness for College and Careers (PARCC) assessments, and new teacher-principal evaluations; and professional development experiences, such as the Educator Effectiveness and Teacher Induction Academies.



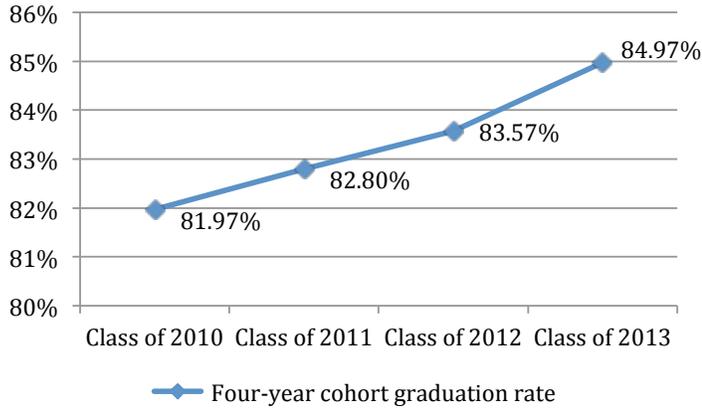
With [22 school systems fully participating in RTTT](#), Maryland’s education improvements reach the overwhelming majority of students in the State:

- 79% of all students in the State
- 94% of high-poverty schools
- 77% of minority students
- 85% of students in poverty

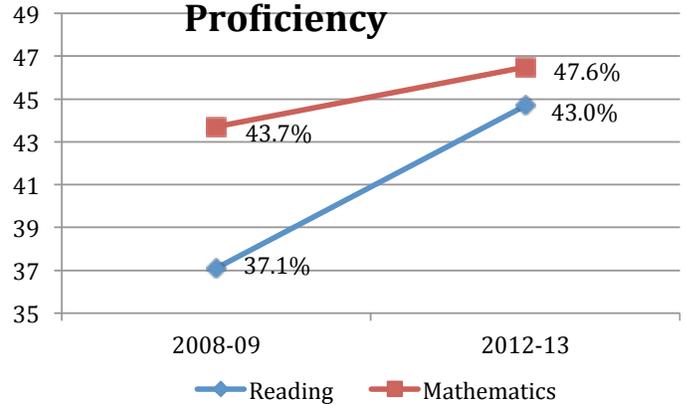
Maryland began its Race to the Top initiatives in 2010. Where are we today?

Just four years after initiating its RTTT program, Maryland is already seeing positive outcomes for student achievement on a variety of indicators.

Graduation Rate



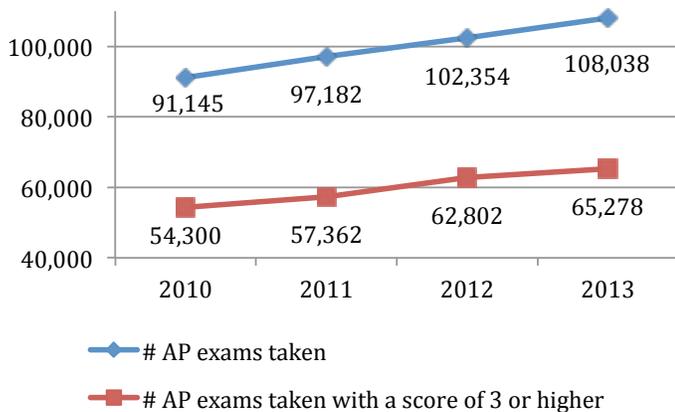
NAEP Assessments 4th Grade Student Proficiency



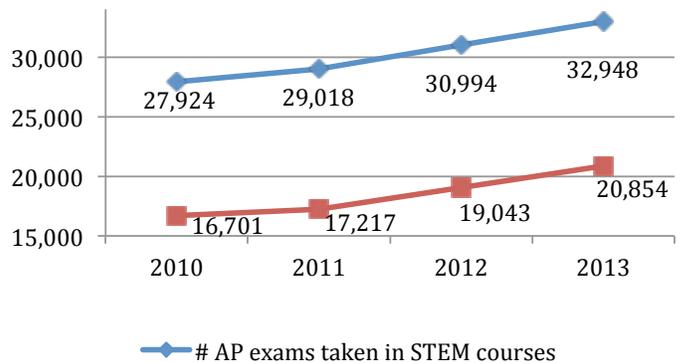
[Maryland's high school graduation performance](#) has increased each year since 2010.

[Results from the 2013 National Assessment of Educational Progress \(NAEP\)](#) assessments illustrate growth in Maryland's reading and mathematics results for grade four.

Advanced Placement (AP) Results



AP Results STEM Exams*



[Maryland continues to lead the nation in AP success.](#) Over the past four years, both the number of AP exams taken and the number receiving scores of 3, 4, and 5 have steadily increased. The same is true when looking at AP exams in STEM courses – both the number of AP STEM exams and success on AP STEM exams has increased. A score of 3 or higher on the 5-point scale is considered mastery of college-level work and qualifies students to receive credit at many colleges and universities.

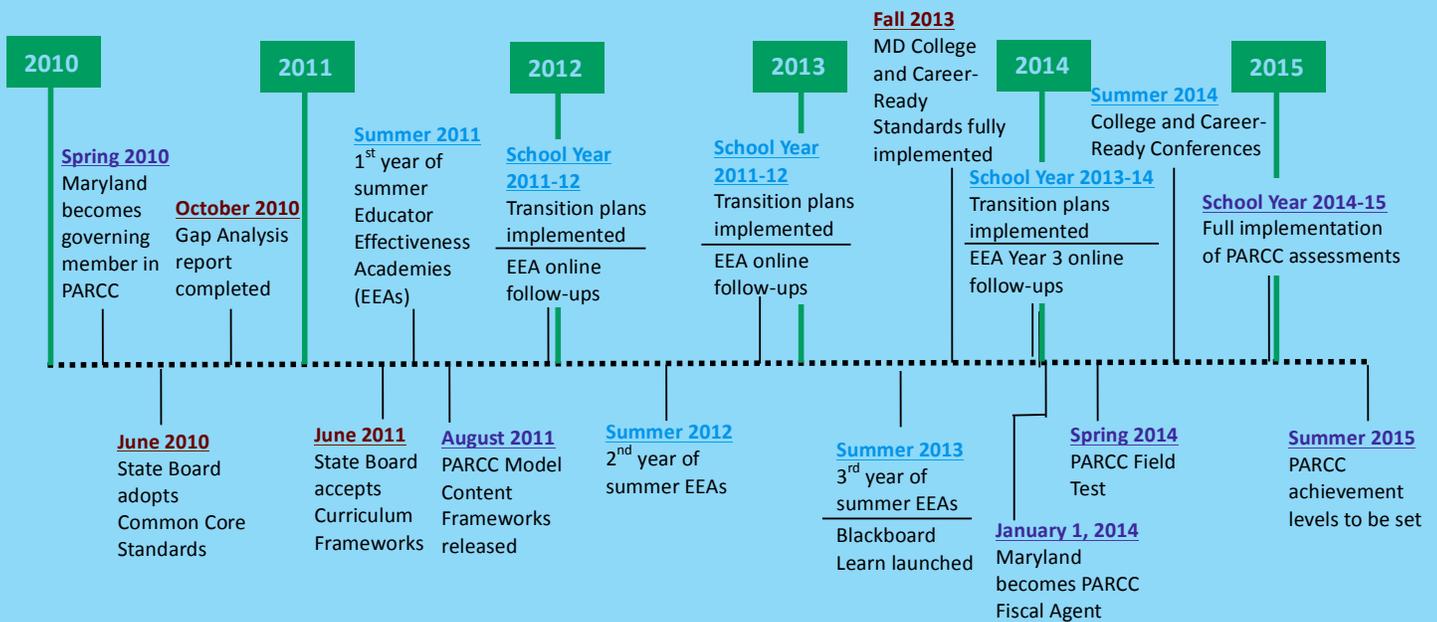
*AP STEM exams include assessments in AP Biology, Calculus, Computer Science, Physics, Chemistry, Environmental Science, and Statistics.

STANDARDS AND ASSESSMENTS

The world is always changing, as are the expectations for what individuals need to know and be able to do in order to be successful in today’s knowledge-based, global workforce. As expectations rise, it is more important than ever to provide all students with a world class education that prepares them for the realities of college and careers in the 21st century. This means continuing to raise proficiency rates, close achievement gaps, and increase the performance of all students. Maryland is working to improve its education system to meet these challenges and provide today’s students with the skills and knowledge they need to be prepared for success tomorrow.

The best way to prepare Maryland’s 866,169 public school students for life after high school is to ensure that they graduate with a strong foundation in the core academic areas that will open doors in the future. That is why the State implemented new, higher standards for student learning and advanced assessments aligned to the standards. Over the past four years, Maryland has also worked to support educators with the critical resources and training needed to help ensure these initiatives reach every school in the State.

TIMELINE: Transitioning to New Standards and Assessments

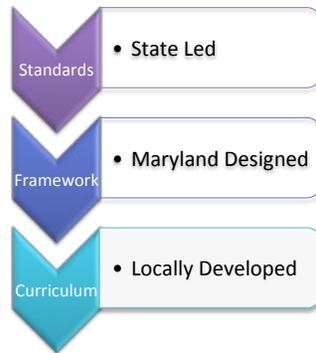


- Dates in **RED** relate to the development and implementation of Maryland’s College and Career-Ready Standards
- Dates in **PURPLE** relate to the implementation of the PARCC assessments
- Dates in **BLUE** relate to the timing of professional development or resources provided to educators on the new standards and assessments

Developing and Implementing New, More Rigorous Standards for Student Learning

The Maryland College and Career-Ready Standards

In school year 2013-14, the new Maryland College and Career-Ready Standards were fully implemented in all schools across the State. These new, more rigorous academic standards are based on the [Common Core State Standards](#), a set of consistent, high-quality academic goals for what students should know and be able to do in English Language Arts/literacy (ELA) and mathematics, which have been adopted by Maryland and more than 40 other states.

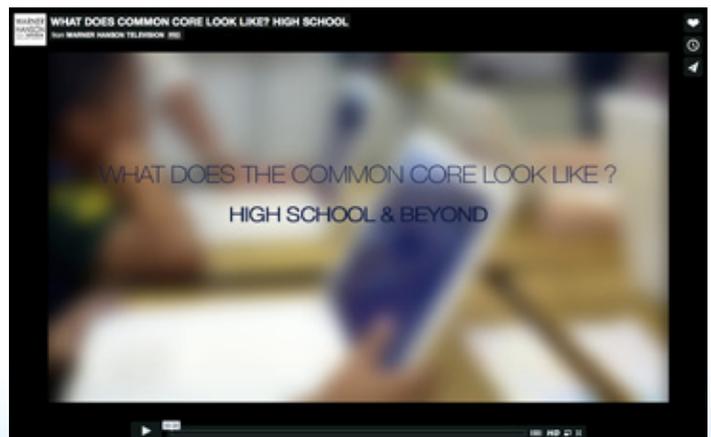
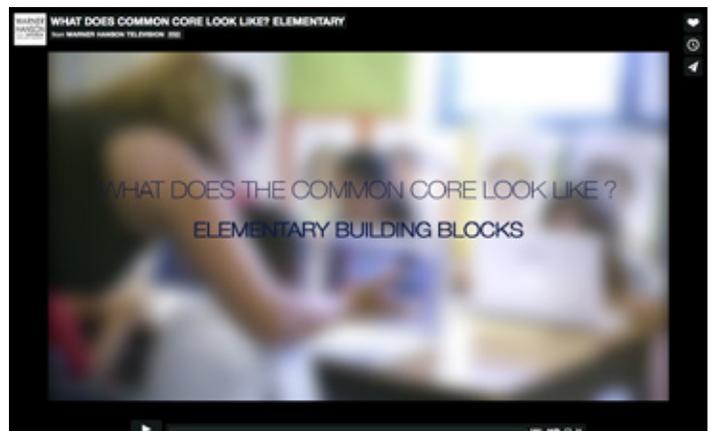


Maryland took the Common Core State Standards and adapted them to the specific needs of the State – creating the [Maryland College and Career-Ready Standards](#). These new learning standards define what students should know and be able to do by the end of each grade in order to graduate from high school fully prepared to enter post-secondary education and the workforce. As students master each standard, they are building the skills and knowledge necessary to succeed in their next step. Students will receive an education that not only leads to a high school diploma, but also prepares them for success, without remediation, in college, career-training, and life after graduation.

The Maryland College and Career-Ready Standards provide learning goals for each grade level, but they are not a curriculum. After the State Board of Education adopted the Common Core Standards, Maryland educators compared the new standards to the existing State Curriculum Standards to determine which skills and content matched – performing a “gap analysis.” With this information, education experts and teachers from across the State worked to translate the standards into instructional frameworks that local school systems and educators could use to help develop their own standards-aligned curriculum

and instructional resources. [The frameworks](#) define what students should know and be able to do in order to meet each standard.

Each local school system developed its own curriculum based on the new standards, and the frameworks help teachers create lesson plans, guide their instruction, and tailor how they teach the standards to the specific needs of their students. Instructional resources and professional development programs were also provided to help Maryland educators as they implemented the new standards in their classrooms. Curriculum specialists in collaboration with Maryland educators from across the State developed model units and lessons at every grade level for both ELA and mathematics, as well as for STEM. These units and lessons, plus numerous other instructional and professional learning resources are available on [Blackboard Learn](#), Maryland’s new online learning and curriculum management system.



Project Spotlight

Greater access to the PSAT:

Maryland awarded grants to three local school systems received grants for 10th grade students to take the PSAT and access the extensive network of resources offered by the College Board to better prepare them for future academic success. By the end of RTTT, it is anticipated that a total number of 14,535 students will have taken the PSAT through these grants.

Implementing Assessments Aligned to the New Standards

The PARCC Assessments

Better standards call for better assessments, not more testing. To help ensure that every student is on a path to college and career readiness, the State is implementing new assessments that are aligned to the Maryland College and Career-Ready Standards and measure what students should know at each grade level.

Maryland is a Governing State and the Fiscal Agent for the [Partnership for Assessment of Readiness for College and Careers \(PARCC\)](#), a multi-state consortium working to develop high-quality



assessments that measure the critical content and skills of the new standards. More than 100 Maryland professionals have been involved in the design and development of the new PARCC assessments, including teachers, administrators, local school system and MSDE staff, and representatives from the State's Institutions of Higher Education.

Students will take the PARCC assessments on computers, although there will be a paper and pencil option at first, allowing teachers to see test results quickly and adjust classroom instruction to the needs of their students.

The computer-based assessments incorporate technology-enhanced items, which make the test more engaging for students than the bubble tests they are used to – assessing critical thinking and problem solving skills. When all students take the PARCC it will establish a new baseline for measuring growth in student achievement, from which our students can reach new heights.

In spring 2014, Maryland, along with other PARCC states, participated in a [field test](#) of the new assessments – essentially testing the test – to help the consortium make final decisions about test design, test items, testing time, and scoring. At least one class in nearly every Maryland public school participated in the field test – nearly 40,000 students in total – allowing educators, school leaders, and students to become familiar with the new assessments before they are fully implemented in 2014-15.

Formative Assessment

Maryland is developing an online bank of formative assessment resources to assist educators in gauging students' learning throughout the year and to help inform teachers' decision-making about future instruction. The [formative assessment bank](#) will contain 4,900 selected response items and 984 performance-based tasks aligned to the Maryland College and Career-Ready Standards and PARCC assessments.

MSDE is also providing teachers with intensive professional development on how to use formative assessments to support student achievement in their schools. The Formative Assessment for Maryland Educators program, or [FAME](#), is a year-long collaborative professional learning process with the goals of supporting teacher reflection around formative assessment, helping teachers revise and refine their current practices within their classroom and school, and creating lasting change in schools and local school systems. The FAME program is currently being piloted by 132 teachers in 38 schools across the State.

Supporting Educators during the Transition to New Standards and Assessments

Implementing new learning standards and aligned assessments statewide is a huge shift. To help ensure that Maryland's educators have the training and resources to successfully make that transition, the State provided extensive professional development opportunities and developed a wealth of training and instructional resources.

The Educator Effectiveness Academies

Over three consecutive summers (2011, 2012, and 2013) prior to full implementation of the new

standards, teams from every school in the State – which included an ELA teacher, mathematics teacher, STEM teacher, and the school's principal – participated in three-day professional learning sessions on Maryland's new College and Career-Ready Standards, through the [Educator Effectiveness Academies](#). During the Academies, participants broke out into grade level and content-specific sessions, led by MSDE-trained Master Teachers – content area expert teachers who facilitated the Academy sessions. The three years of Academies provided a continuum of change, building participants' knowledge over time – from awareness of the standards, to shifts in instructional practice through lessons and units, and finally to ownership and innovation.

At the end of each summer training, the school teams crafted individualized transition plans to bring the learning they had received back to their schools and provide training on the standards and assessments to the rest of their school's staff over the following year. Online follow-up sessions were conducted throughout the school year to provide targeted support to educators across the State and enhance their understanding of the standards.

Maryland's College and Career-Ready Conferences

Building on the success of the Educator Effectiveness Academies, in summer 2014 MSDE invited educators



statewide to attend new [College and Career-Ready Conferences](#). These two-day regional convenings were held at eight locations throughout the State and provided additional support to Maryland’s teachers, school and local school system leaders, and other education stakeholders for the continued successful implementation of the new standards.

In contrast to the Educator Effectiveness Academies of the past three years, the Maryland College and Career-Ready Conferences offered a personalized professional learning experience for the 3,700 Maryland educators who voluntarily attended the conferences. Over 140 different topical sessions on the new learning standards were offered – allowing attendees to participate in those sessions that best met their needs and those of their schools. The content of the sessions was determined through feedback gathered from site visits conducted by MSDE curriculum and assessment staff to every local school system in the State during the 2013-14 school year.

Number of attendees: 3,700

Number of Master Teachers trained: 300

Additional Resources Developed to Support Educators in the Classroom

- 4,000 to 6,000 searchable online instructional resources, in all subject areas, will be available on the [Blackboard Learn website](#) by the end of RTTT
- 250 ELA and mathematics intervention and enrichment modules, plus 70 disciplinary literacy modules, will be available for educators to use in their classrooms to help support and enhance student learning
- 100 lesson seeds for fine arts were developed to support the new literacy standards
- Over 50 disciplinary literacy resources were developed to support social studies and science educators as they integrate the new literacy standards into their instruction
- 48 videos of Master Teacher-facilitated sessions from the Educator Effectiveness Academies, to serve as professional learning modules on the

new standards

- 20 online professional development courses for educators
- 20 archived webinars to assist Maryland educators with professional learning needs related to the standards, plus additional webinars to be developed throughout the 2014-15 school year
- Eight videos of Master Teachers teaching classroom lessons that highlight the instructional shifts of the Maryland College and Career-Ready Standards in ELA, mathematics, STEM, and disciplinary literacy

Newly Developed Courses and Programs of Study

- 4 Foundations of Technology – Newly enhanced course that will be offered in 22 local school systems to meet the State’s technology education graduation requirement. Currently, 116 high schools and 313 teachers are participating in the program and professional development is being provided to support teachers’ instructional practice
- Construction Design and Management – Four-course Career and Technical Education program implemented in 12 high schools in eight local school systems
- [Project Lead the Way \(PLTW\) Gateway to Technology](#) – STEM program for middle school students in low-performing schools that will be implemented in 13 middle schools in three local school systems by the end of RTTT
- [World Languages Pipeline](#) – New STEM-focused elementary-level language programs in Arabic, Chinese, and Spanish have been implemented in 12 local school systems. Read about how one Allegany County elementary school is utilizing this program to teach mathematics and science lessons in Chinese, on the U.S. Department of Education’s PROGRESS blog, www.ed.gov/edblogs/progress
- Eight new online STEM courses – Environmental Science, Cyber-Security, Administration of Justice II, Video Game Design, Foundations of Computer Science, Computer Science Concepts and Practices, Financial Literacy, and Foundations of Technology

DATA SYSTEMS

Maryland's work to improve data collection and analysis, and technology in the State's education system hits directly at the heart of MSDE's overarching vision of equity, efficiency, and excellence. Through the development and expansion of the State's longitudinal data system, educators, policy makers, parents, and other stakeholders will have a clear view of long-term student outcomes and be able to make policy decisions that help close gaps and increase the achievement of all students. Better technology, the development of online resource repositories, and new computer-based assessments will allow teachers to more quickly address the needs of their students and provide supports or enhancements as needed. New ways to view student, school, system, and state-level performance data will help Maryland as it continues to strive for excellence.

Strengthening and Expanding the Statewide Data System and Technology Infrastructure

Statewide Longitudinal Data System

Collecting better, more comprehensive student data is critical to understanding how Maryland students are being prepared for college and careers. MSDE is working to expand and enhance the capability of its Longitudinal Data System to track student progress over time, from preK-12 into postsecondary education and the workforce. By linking data from pre-school through higher education and into the workforce, Maryland will be able to track student progress towards college and career-ready goals and identify larger educational trends at the school, local school system, and State levels. Maryland will be able to develop a clear picture of just how well the State is meeting its goal of preparing students for college and careers, and help identify programs and policies to improve success as students make those transitions.

Educator Information System

Maryland developed a new Educator Information System (EIS) that will allow the State to more effectively track teacher outcomes as well as support the certification of over 260,000 educators. The EIS will make it possible to link evaluation data from

teachers in the 24 local school systems to their preparation programs, match a teacher's certification area to what they are assigned to teach, allow the public to look up teacher certification, and make the online application process more accessible and easier to navigate. With this information, the State will also be able to review trend data on teacher evaluation and link this data to preparation programs to determine if there are differences in the outcomes for new teachers and their students. This data can then be used to provide feedback to teacher preparation programs to increase their effectiveness and recognize promising practices in teacher education.

Technology Grants to Local School Systems

The State provided subgrants to 22 school systems to support improvements and upgrades to local technology and data infrastructures. School systems used the funds in a variety of ways to address their individual needs, including increasing wireless Internet access in schools and classrooms, purchasing new equipment and devices, upgrading security systems, and developing or upgrading electronic transcript systems.

Providing Accessible, Real-Time Data to a Variety of Education Stakeholders

To ensure that all students are on track for academic success, it is imperative to be able to track student progress and educational outcomes and use that information to inform instruction in the classroom, school and system-level decisions, and education policies statewide.

The wealth of education data that is being collected will be organized into easy-to-use online tools to help teachers, parents, policymakers, and other education stakeholders interpret and utilize this new information. At the classroom level, teachers can use this data to adjust instruction to the needs of their students and ensure that they are on track and continue to make progress. At the State level, this information can provide insight into the success of educational reforms.

P12 Data Dashboards

To ensure that the data collected through Maryland's Longitudinal Data System is accessible and

Dashboard –

a computer tool allowing for the display of key performance measures for a student, class, or school

Maryland's P12 Dashboards offer the ability to:

- ✓ Chart trends in performance
- ✓ Align instructional strategies and school improvement goals
- ✓ Identify and correct problems
- ✓ Generate detailed reports

informative to key stakeholders (e.g., parents, students, teachers, principals, local school system leaders, community members, unions, researchers, and policymakers) in their efforts to help improve education, Maryland has compiled and organized that data into 36 easy-to-read dashboards.

The dashboards

allow users to gauge progress on individual indicators for schools, local school systems, and the State as a whole. Collectively, the dashboards will enable Maryland to track its progress towards a number of ambitious goals to increase student achievement. At the school level, teachers and students will be able to use the dashboards to adjust instruction and improve student learning in the classroom.

All 36 dashboards will be available in the 2014-15 school year and will have web-accessible public-facing content. However, the privacy and security of sensitive information is paramount and, therefore, access to student-level data will be restricted to those policy makers and education leaders that have been granted secure logins. MSDE is providing in-person and online trainings to help stakeholders utilize these tools to their full extent, including 40 online tutorials for all levels of users that describe the content and functionality of each dashboard.

Using Data and Technology to Improve Instruction and Learning

Blackboard Learn

To support educators during the transition to the new [Maryland College and Career-Ready Standards](#) and [PARCC assessments](#), MSDE has developed [Blackboard Learn](#), an online repository of instructional and informational resources aligned to the State's new academic standards. Blackboard Learn is designed to connect educators with high-quality materials and tools that can assist in their efforts to prepare students for success in college and careers. The website is a 24/7 one-stop-shop where teachers can find model units and lessons, modules to support student intervention and enrichment, professional development opportunities, and many other resources to help enhance and improve their classroom instruction and student learning.

Parents, students, and others can find a wealth of useful resources on Blackboard Learn as well, including online learning modules, handouts, guides, and videos on Maryland's standards and assessments. New materials are added to the site regularly, and can be accessed by going to msde.blackboard.com.

By the end of RTTT, Maryland's Blackboard Learn website will house all content area resources, including:

- The Maryland College and Career-Ready Frameworks
- 133 model units for elementary, middle, and high school in ELA and mathematics, each containing several lesson plans and lesson seeds
- Over 130 lessons and lesson seeds in STEM, fine arts, and gifted and talented education
- 250 ELA and mathematics intervention and enrichment modules, plus 70 modules in disciplinary literacy
- 21 adolescent literacy and STEM student modules
- The Formative Assessment Bank with 4,900 selected response items and 984 performance-based tasks
- A searchable online instructional toolkit with 4,000-6,000 resources in all subject areas

GREAT TEACHERS AND LEADERS

Effective teachers and leaders are the keys to creating successful schools and successful students. Research has shown that [teacher and principal effectiveness has greater impact on student learning than any other factor in a school system](#). In fact, [teachers matter more to student achievement](#) and a student's [future success](#) than any other aspect of schooling.

With support from its RTTT grant, Maryland implemented a variety of initiatives to help ensure that every student has an effective teacher, every school has effective leaders, and every teacher and leader has access to the preparation, ongoing support, recognition, and opportunities for collaboration he or she needs to succeed.

Improving Teacher and Principal Evaluations to Promote Professional Growth

Maryland believes that the primary goal of the evaluation process is to facilitate the continuous improvement of our State's teachers and principals – enhancing their effectiveness in the classroom and schoolhouse, which will in turn lead to student growth. Under the [State's new system](#), evaluation results will be used to identify and implement individualized professional development goals and plans that will help teachers and leaders grow.

Over the course of the first three years of RTTT, the State worked with its local school systems, teachers' associations, and principals' organizations to develop a [rigorous, transparent, and fair evaluation system](#), giving school systems the flexibility to include local measures within the broader statewide requirements. During that time, school systems had the opportunity to [field test](#) their new evaluations and provide the State with vital feedback. More than 8,600 educators participated in the field test and received ratings based on the new evaluation systems in their local school systems. Findings from the field test were used to make refinements and enhancements to the

Project Spotlight

Student Learning Objectives

Maryland has incorporated [Student Learning Objectives](#) (SLOs) as a measure of student growth in teacher and principal evaluations, believing SLOs will allow for specific school and local school system goals to be captured while also maintaining a focus on the importance of student growth.

SLOs are measurable instructional goals for a specific group of students over a set period of time. Through the SLO process, educators are empowered to examine data and student outcomes to make meaningful decisions about what is most important for their students to learn and how their students' learning is measured.

Maryland has become a national leader on SLOs and is working closely with the Community Training and Assistance Center (CTAC), the nation's leading practitioner and evaluator of SLOs, on the development and implementation of SLOs throughout the State.

In June 2014, [MSDE signed an historic Memorandum of Understanding](#) with its State Board of Education, Maryland's two teachers unions, and the associations that represent the State's local boards of education, superintendents, and elementary and secondary school principals to strengthen the implementation of SLOs. This statewide level of collaboration is unprecedented nationally

evaluation system before it was implemented across the State in school year 2013-14.

Throughout the 2013-14 school year, MSDE conducted a [comprehensive professional development program](#) to assist local school systems with all aspects of implementing their evaluation systems, and provided one-on-one support and guidance as needed. At the end of the school year, every teacher and principal in the State received an evaluation rating through this new system.

Maryland remains committed to providing all educators with timely, meaningful, and fair evaluations. Through the ongoing analysis of evaluation results, surveys, regular feedback, and quality checks with local school systems, Maryland's evaluation system continues to build credibility, strength, and [recognition](#).

Increasing the Equitable Distribution of Effective Teachers and Principals

In order to close achievement gaps and increase student performance, especially in the State's lowest-achieving, high-poverty, high-minority schools, Maryland must ensure that the most talented teachers and principals are placed in the schools where they are needed most.

To reduce the teacher quality gap among high-poverty and low-poverty schools, the State worked to identify the most effective educators and provide staffing reforms and recruitment efforts to encourage them to lend their talents to the neediest schools. Maryland also created targeted programs and incentives to increase the number of effective educators in these schools teaching in hard-to-staff areas, such as STEM, English for Speakers of Other Languages (ESOL), and special education.

In recent years, the number of Maryland students with limited English proficiency has steadily increased, from 49,268 students in 2010 to 61,013 students in 2014, an increase of 24 percent in just four years. To address the needs of these students, the State

provided incentives to content teachers in low-achieving, high-minority, high-poverty schools with significant numbers of students who are English Language Learners (ELL) to obtain an additional certification in ESOL. Teachers with this certification are better prepared to work with ELL students and meet the diversified needs to develop both their language and content knowledge.

By the end of the RTTT program:

- 440 incentives will have been given to highly effective teachers and principals to work in Maryland's low-achieving, high-minority, high-poverty schools – the lowest five percent of schools in the State
- 416 incentives will have been given to highly effective ESOL, special education, and STEM educators to teach in low-achieving, high-minority, high-poverty schools
- 501 content teachers who work in low-achieving, high-minority, high-poverty schools with significant numbers of ELL students will have received additional certification in ESOL

Providing High-Quality Pathways for Aspiring Teachers and Principals

Maryland is working to improve teacher and principal preparation programs to ensure that all graduates truly have the skills, knowledge, and disposition to be effective teachers and leaders in all of Maryland's public schools.

The State's higher education community has partnered with MSDE to increase the number and quality of secondary science and mathematics teachers, support elementary educators in teaching STEM, and increase the ability of teachers to be effective in high-needs schools. Work has also focused on preparing new principals to work in challenging schools.

In addition, Maryland initiated programs to assist teachers and principals as they entered the profession

or took on new roles; developing a high-quality teacher induction program to ensure all new teachers successfully transition to the classroom and maximize student achievement, as well as providing new principals with access to highly-qualified mentors to help improve their effectiveness.

Through RTTT, the State has also expanded the collection of credentialing data to link teacher effectiveness to preparation programs.

Other accomplishments include:

- **Professional development and technical assistance** has been delivered to leaders of teacher preparation programs across the State on the Maryland College and Career-Ready Standards. Through this effort, MSDE will help ensure that teacher preparation programs are able to provide Maryland public schools with teachers who are ready to engage students in effective critical thinking and the deeper, richer content of the new standards
- **UTeach** – A teacher preparation program designed to help build the next generation of secondary STEM teachers. The program allows teacher candidates to obtain secondary teacher certification while earning a degree in mathematics or science, and provides early and frequent opportunities for classroom field experience. By the end of RTTT, 160 teacher candidates will have taken part in the program.
- **Teach for Maryland** – An initiative aimed at effectively preparing educators to teach in high-poverty, and culturally and linguistically diverse schools; and helping to increase the retention rate of effective teachers in those schools. By the end of RTTT, 254 teacher candidates will have been trained through this initiative.
- **Elementary STEM certification** – To help ensure that Maryland's students gain a strong foundation in STEM from an early age, the State developed teacher preparation programs and certifications to train educators to teach an integrated STEM curriculum to elementary students. Through this

Project Spotlight

The Teacher Induction Academies

Building a Teaching Force for the 21st Century

Maryland recognizes the important role that strong, effective mentoring plays in helping new teachers successfully transition to the classroom. The State developed its [Teacher Induction Academy](#) to help develop the skills and knowledge of those mentors. The multi-day Academy programs provided teacher mentors and local Induction Coordinators with strategies to address the critical needs of beginning teachers, improve their instructional quality, and help inductees succeed in their initial assignments. Through successful mentoring, the State's ultimate goal is the greater retention of effective teachers in the profession. To date, 941 new teacher mentors have been trained through Maryland's Teacher Induction Academies.

initiative, 12 teacher preparation programs have changed their undergraduate and/or postgraduate programs to strengthen the skills of elementary teachers to teach STEM and three Institutions of Higher Education will now offer an undergraduate concentration in elementary STEM education. As a result of this work to date, seven in-service programs, which provide training to current teachers, have been developed and the changes made to pre-service elementary education programs have impacted over 500 teacher candidates. Additionally, to expand practicing

teachers' expertise in STEM instruction, Maryland developed an elementary STEM endorsement – *Instructional Leader STEM (PreK-6)* – that has been adopted by the State Board of Education and the Professional Standards and Teacher Education Board. Currently, 295 teachers from 14 local school systems are enrolled in programs that lead to this endorsement.

- **New Leaders for New Schools** – New Leaders for New Schools (NLNS) is a principal preparation program designed to educate leaders who are prepared to increase student achievement in challenging schools. Maryland's NLNS program currently includes 25 candidates in the State's eastern shore counties (Dorchester, Somerset, Wicomico, Talbot, and Worcester), and 69 aspiring new principals in Baltimore City and Prince George's County. A number of participants in the NLNS program have already been promoted to leadership positions.
- **The Principal Pipeline Initiative and Governor's Promising Principals Academy** – To help ensure that all schools have a strong leader, Governor Martin O'Malley has challenged Maryland to create a pipeline to identify, nurture, and support the development of great principals. As part of this effort, the State is holding a series of professional development experiences for sitting principals and local school system leaders, aimed at improving their abilities in the areas of instructional leadership, community engagement, and change management. To develop the next generation of great principals, MSDE initiated the [Governor's Promising Principals Academy](#) – a year-long, intensive professional development program, designed to prepare promising school leaders (two from each school system, nominated by their local superintendent) to do the work of the principalship. The first convening of the Promising Principals Academy was held July 28-30, 2014 and received overwhelmingly positive feedback from participants.



“Taking the time to really hone in on my own vision, my own beliefs, and my own goals as an administrator with a group of people and experts was an invaluable experience. I am definitely approaching the start of my

school year (at a new school) in a way I would never have had the ability to do without this Academy experience.” Chelsea Skoczylas, Promising Principals Academy participant and Assistant Principal at Monocacy Middle School, Frederick County



“My biggest take-away is to become a leader that inspires others to follow because they want to, not because they have to.” Theresa Vener, Promising Principals Academy participant and Assistant

Principal at St. Michaels Middle-High School, Talbot County



SCHOOL TURNAROUND

Preparing students to graduate with the skills and knowledge they need to be successful in the future is the ultimate goal of all Maryland schools; however, the State's lowest-performing schools face a number of obstacles to providing students with this critical foundation. Turning around these struggling schools and increasing their ability to improve student achievement is crucial. All students – no matter their income level, where they live, or what school they attend – must have access to high-quality learning opportunities that prepare them to succeed in college, careers, and life after graduation.

Through RTTT, Maryland has worked to significantly improve the performance of the State's lowest-performing schools and set them on a path for continued improvement by fully implementing

the innovative [Breakthrough Center](#) approach for transforming low-achieving schools and school systems.

MSDE's Breakthrough Center coordinates, brokers, and delivers support to schools and local school systems across the State. The Center was established to provide a coherent strategy for leveraging and coordinating the State's services in order to build the internal capacity of schools and local school systems to lead and sustain student achievement gains. During years one through four of Maryland's RTTT grant, the Breakthrough Center provided hands-on support to the State's 21 Priority Schools, the lowest performing five percent of Title I schools in the State, and their 20 feeder schools in Baltimore City and Prince George's County.



Identifying Root Causes and Customizing Support

Maryland’s lowest-achieving schools must look at the school as a whole, as well as its individual components, to determine the barriers to student achievement. To that end, the Breakthrough Center works to build the capacity of individuals and the entire school system to turn around these low-achieving schools. The Center also provides direct support and guidance to teachers and principals during the turnaround process, including job-embedded professional development for teachers and leaders in these struggling schools.

The Breakthrough Center establishes personal and customized relationships with local school system, school leaders, and instructional staff, working with local leaders to identify the precise nature and magnitude of need, and assembling customized and strategic supports and interventions to address them. Strong emphasis is placed on building the capacity of the schools and school systems to not only achieve turnaround, but to also sustain it.

To address the individualized needs of these schools and local school systems, the Breakthrough Center relies on its Cross Functional Team, comprised of experts from within MSDE – including staff from the Title I Office and the Divisions of Curriculum, Assessment, and Accountability; Student, Family and School Support; Academic Policy and Innovation; Career and Technology Education; and more. The Cross Functional Team is charged with providing direct, specialized support to schools and school systems by brokering needed services or providing direct services related to academics and instruction, leadership, professional development, data, school safety, and scheduling.

The Breakthrough Center also provides differentiated support to Maryland’s Focus Schools. Focus Schools are among the 10 percent of Title I schools with the largest gap between the highest-performing student group and the lowest-performing student group, or

a Title I eligible high school with a graduation rate of 60 percent or lower. The Focus School Network, convened and facilitated by MSDE’s Breakthrough Center, provides these schools with the opportunity to work together to address common issues and share strategies for closing the targeted achievement gaps within their schools.

Focusing on Teachers and Leaders

Through customized professional development, the Breakthrough Center works directly with classroom teachers to improve their content knowledge and instructional practices, and with school leadership teams to provide job-embedded professional development to increase student achievement.

Other professional development initiatives for teachers and principals include:

- **The Aspiring Principals Institute**, which works to build leadership capacity and create a pipeline of leaders for schools in turnaround. During the year-long program, Aspiring Principals Institute fellows plan and implement projects that advance their professional growth around the outcomes of the Maryland Instructional Leadership Framework and support their school’s improvement plan. Since 2011, a total of 81 teacher-leaders and assistant principals have participated in one of the annual Institutes. To date, all participants have been given increased responsibilities in their role as a leader in their school and/or been promoted into a higher level of leadership since their completion of the program.
- **The Academy for School Turnaround**, which provides intensive professional development to principals serving in low-achieving schools, their supervisors, and other leadership staff. During Academy sessions, attendees are presented with the most current research on school turnaround as well as practical solutions that can be immediately implemented to achieve rapid improvement in teaching and learning. During

RTTT, a total of 157 school and local school system leaders participated in the Academy for School Turnaround.

Addressing Non-Academic Challenges

Parents and families are essential partners in helping students achieve college and career readiness. To build and sustain positive relationships between home and school, the Breakthrough Center collaborates with schools and local partners to engage parents and families at home, at school, and in the community.

The Breakthrough Center also works with struggling schools to support and enhance programs around:

- Physical activity, health, and wellness
- Improving school attendance
- Transforming school culture and climate
- Coordinating student services

Project Spotlight

Transforming Schools through Parent and Community Engagement



In 2010, Commodore John Rogers Elementary/ Middle School was struggling – four principals had come and

gone during the previous five years and it was ranked as one of the lowest-performing schools in the State. But through Maryland's school turnaround efforts, Commodore initiated new strategies to transform school culture and dramatically accelerate learning outcomes. With a new principal at the helm, the school implemented a holistic parent and community engagement strategy, building relationships with parents and students, holding focus groups, and getting parents and community members involved with school improvement efforts.

In the past four years, Commodore's results have improved measurably – enrollment more than doubled, chronic absences dropped significantly, and the percentage of students proficient in reading and mathematics rose 20 percent – and the school has created a solid foundation for continuous improvement. To learn more about this successful initiative, visit the U.S. Department of Education's PROGRESS blog, www.ed.gov/edblogs/progress.



SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

In today's innovative and technology-driven world, an education that provides students with a strong foundation in STEM is essential. Jobs in STEM fields are growing more rapidly than others and skilled STEM workers are in high demand. In 2009, [Governor Martin O'Malley's STEM Task Force reported](#) that Maryland has approximately 6,000 STEM job openings

Over 950 stakeholders representing Maryland's businesses and governmental agencies, colleges and universities, and local school systems provided input on the Maryland State STEM Standards of Practice.

every year, yet the State only produces about 4,000 STEM graduates.

Maryland's vision is to be a leader in STEM education, preparing and inspiring generations of learners to meet the challenges of today's global society through innovation, collaboration, and

creative problem solving. To achieve this, Maryland placed a large emphasis on increasing STEM education throughout its RTTT program.

Developing of STEM Standards and Curricular Resources

STEM Definition and STEM Standards of Practice

Maryland's efforts to increase STEM education for all students started from the ground up – by establishing Maryland's definition of STEM education and creating

the Maryland State STEM Standards of Practice.

Maryland was the first state to develop specific [STEM Standards of Practice](#), which detail the skills and knowledge students must master to be prepared to meet the increasing demands of the workplace where STEM skills are required, and lay a foundation of STEM education for all students. State STEM specialists and stakeholders from across Maryland worked together to develop these foundational documents – Maryland's STEM Education Definition and STEM Standard of Practice – which were accepted by the State Board of Education in April 2012.

With a definition of STEM education and STEM Standards in place, the State worked with Maryland educators to develop STEM units, lessons, and other instructional resources that teachers could use in their classrooms. These resources are housed on [Maryland's Blackboard Learn website](#). Maryland's STEM Standards have also guided the work of many of the State's partners in STEM education, including higher education, industry, and informal STEM education providers, as they deliver STEM content to teachers and students statewide.

Project Lead the Way Gateway to Technology

The Project Lead the Way (PLTW) Gateway to Technology program is a national STEM middle



STEM Education Defined:

STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering, and mathematics. STEM Standards of Practice guide STEM instruction by defining the combination of behaviors, integrated with STEM content, which is expected of a proficient STEM student. These behaviors include engagement in inquiry, logical reasoning, collaboration, and investigation. The goal of STEM education is to prepare students for post-secondary study and the 21st century workforce.

school curriculum that has been implemented in nine low-performing middle schools in Baltimore City, Prince George's County, and Dorchester County, giving students the opportunity to participate in rigorous and engaging project and problem-based STEM instruction. Four additional low-performing middle schools will implement the PLTW Gateway to Technology program in school year 2014-15.

World Languages Pipeline

Maryland's competitive edge in an increasingly flat world depends upon preparing graduates who are highly skilled in STEM and proficient in languages other than English. Through RTTT, Maryland developed the World Languages Pipeline project, which provides instructional materials and professional development for elementary teachers who wish to integrate STEM content into their world language and ELL classrooms. To date, 12 local school systems have implemented new World Language programs in Arabic, Chinese, and Spanish.

Preparing More STEM Teachers

Over the last four years, Maryland has worked to implement a number of programs that encourage future and current teachers to develop a concentration in the STEM fields, including the following:

- MSDE developed an Elementary STEM endorsement – *Instructional Leader STEM (PreK-6)* – to help increase the number of STEM teacher-leaders in Maryland schools.
- Twelve teacher preparation programs in the State have worked to change their undergraduate and/or postgraduate programs to strengthen the skills of elementary teachers to teach integrated STEM content.
- Three Institutions of Higher Education will offer an undergraduate concentration in elementary STEM education.

These initiatives will help elementary teachers to become more competent and confident in teaching integrated STEM content, and more students will be prepared for rigorous coursework as they start secondary school. To date, it is estimated that 17,500 students have been impacted by teachers in these programs.

Supporting Current STEM Teachers and Students

Strengthening Maryland's STEM advantage means giving teachers the support they need to build students' STEM knowledge and skills, as well as giving students robust opportunities to engage with STEM professionals and apply learning to solve real-world problems. To facilitate this effort, MSDE partnered with the [Maryland Business Roundtable for Education](#) (MBRT) to develop [STEMNet](#), an online platform that provides cutting-edge resources, tools, programs, and workforce connections to strengthen STEM teaching and learning.

STEM education was also a major focus at all three summer Educator Effectiveness Academies (in 2011, 2012, and 2013) and there are dozens of STEM instructional resources, including units, lesson seeds, and webinars, posted on Blackboard Learn.

STEMNet includes resources and programs, such as:

- [STEM Resource Clearinghouse](#) – an online repository of STEM curriculum, lesson plans, tutorials, and classroom-ready experiments
- [STEM Connections](#) – a virtual professional learning community allowing STEM educators and professionals in industry, higher education, and government to connect and collaborate

- [STEM Specialists in the Classroom](#) – a program connecting teachers with STEM professions to co-teach lessons and engage students in the real-world application of course content. To date, 264 STEM professionals have been recruited to participate in [the program](#)
- [STEM Career Exploration](#) – an interactive website that allows students to learn about various STEM career fields, get in-depth information about the careers that interest them, and find internships and job-shadowing opportunities
- [STEM Challenge](#) – a program that gives high school students the opportunity to solve real-world problems posed by industry experts at institutions such as Johns Hopkins, NASA, NOAA, and the National Security Agency

***Number of local school systems using
STEMnet resources = 24 (all of
Maryland’s school systems)***

***Number of teachers and
administrators trained = over 600***



MARYLAND'S MAJOR RTTT ACCOMPLISHMENTS FROM 2010-2014

Standards and Assessments

- ✓ Fully implemented the Maryland College and Career-Ready Standards statewide
- ✓ Developed instructional frameworks, units, and lessons for each grade aligned to the new standards
- ✓ Field tested the new PARCC assessments in at least one classroom in nearly every school in the State
- ✓ Began the development of an online formative assessment bank and initiated the Formative Assessment for Maryland Educators (FAME) professional development program
- ✓ Held the Educator Effectiveness Academies for teams of educators from every school in the State for three consecutive summers (2011-2013)
- ✓ Held eight regional College and Career-Ready Conferences in summer 2014

Data Systems

- ✓ Launched the Maryland Longitudinal Data System, connecting student data from PreK-12, higher education, and the workforce
- ✓ Developed 36 data dashboards and 40 online training tutorials
- ✓ Developed a new Educator Information System
- ✓ Launched Blackboard Learn, Maryland's new curriculum and learning management system

Great Teachers and Leaders

- ✓ Developed, field tested, and implemented new teacher and principal evaluations
- ✓ Incorporated SLOs as a measure of student growth in evaluations
- ✓ Implemented programs to incentivize highly effective teachers and leaders to work in the State's lowest-achieving, high-minority, high-poverty schools and to obtain an additional certification in ESOL
- ✓ Enhanced and expanded educator preparation and development programs, including UTeach, Teach for Maryland, New Leaders for New Schools, the Teacher Induction Academies, and the Principals Pipeline Initiative and Governor's Promising Principals Academy

School Turnaround

- ✓ Fully implemented the Breakthrough Center approach to school turnaround in the State's 41 lowest-achieving schools
- ✓ Provided low-achieving schools with needs assessments, direct support, customized interventions, and professional development to improve student achievement
- ✓ Provided direct instructional support to teachers; and trained educators and school leaders through the Aspiring Principals Institute and the Academy for School Turnaround
- ✓ Worked with low-achieving schools to address non-academic challenges, such as parent and community engagement, and school culture and climate

STEM

- ✓ Became the first state in the nation to develop STEM Standards of Practice
- ✓ Developed programs to increase the number of elementary teachers trained in STEM, as well as a new elementary STEM endorsement, *Instructional Leader STEM (PreK-6)*
- ✓ Partnered with MBRT to develop STEMNet, connecting teachers and students to STEM resources, programs, and opportunities to enhance classroom learning

LOOKING AHEAD

Even though the State's Race to the Top program is winding down, many of the projects implemented through the grant are just now beginning to truly make an impact on Maryland's students, educators, schools, local school systems, and education system as a whole. Initiatives, like the Maryland College and Career-Ready Standards, PARCC assessments, and teacher and principal evaluations, which took years to develop, pilot, and refine, have only recently made their way into schools and classrooms. The full impact

of these improvements to the State's education system is still yet to be seen.

In 2014, Maryland received an extension from the U.S. Department of Education to continue a number of its RTTT projects for a fifth year using funds that the State did not spend during the first four years of the grant – referred to as a “No Cost Extension.” Maryland will use its remaining \$9.94 million to support initiatives such as:



In the years to come, even after the No Cost Extension ends and all the RTTT funds are spent, Maryland will continue to support and sustain the successful programs it initiated through RTTT as part of the ongoing work of the Maryland State Department of Education. MSDE will also continue to provide support

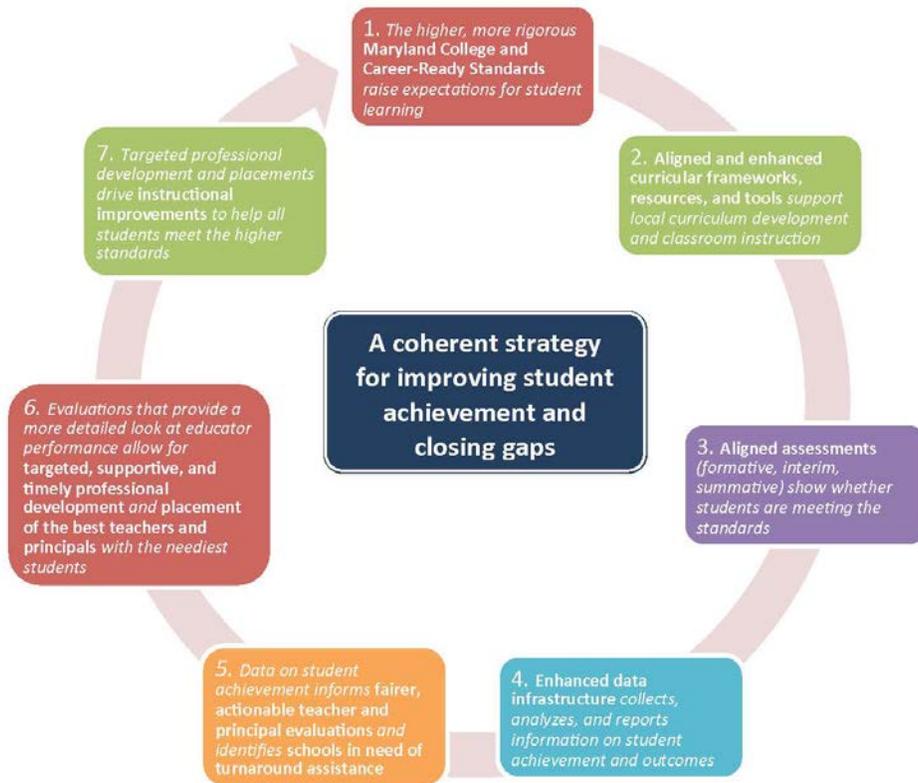
to the State's local school systems to help ensure that these unprecedented efforts to improve education reach every student, every classroom, and every school in the State – elevating Maryland's education system to world class status.



REACHING WORLD-CLASS
Maryland's Race to the Top Accomplishments
2010-2014



Question #1: What was the vision for Race to the Top (RTTT) in your state?



Maryland has one of the nation’s most honored systems of public education for one simple reason— it does not stand still. Over the past three decades, Maryland has built a strong foundation, policy by policy, to achieve national status as a leader in educational excellence. Through it all, one thing has remained constant – Maryland’s commitment to continually improving the education and achievement of all students.

Today, students face the new reality that a high school diploma is just the starting point. The expectations for what individuals need to know and be able to do in order to be successful in college and careers are changing. Our education system must also change to ensure that students graduate from high school prepared to enter post-secondary education and the workforce, without the need for remediation.

Additionally, even in a state like Maryland that is recognized as a national leader in education, achievement gaps continue to exist in far too many schools. In order to move forward, Maryland must focus on improving all levels of achievement, while ensuring that standards and expectations remain high.

Maryland drafted its winning RTTT application with these considerations in mind. The application laid out the State's robust plan to move its education system from national leader to world class, setting an ambitious agenda, focused on improving education by:

- Implementing higher, more rigorous standards and advanced assessments aligned to those new standards to help prepare students for success in college and careers
- Building a statewide technology infrastructure that links all data elements with analytic and instructional tools to monitor and promote student achievement
- Redesigning the model for teacher and principal evaluations, with a focus on preparation, development, and retention
- Fully implementing the innovative Breakthrough Center approach for turning around the State's lowest-performing schools

Question #2: What has changed in the State, LEAs, schools, and classrooms as a result of Race to the Top?

New and Higher Standards Implemented in All Schools

Maryland implemented the higher, more rigorous Maryland College and Career-Ready Standards, which are based on the Common Core State Standards, in all schools statewide. These new standards will give students the skills and knowledge necessary to be successful in college and careers in the 21st century. Educators have been trained to teach the Maryland College and Career-Ready Standards through numerous professional development sessions delivered by their schools, local school systems, and the State, including the Educator Effectiveness Academies and Maryland College and Career-Ready Conferences. With the new standards in place, educators are now teaching students how to become critical thinkers and problem solvers, how to communicate effectively, and infusing literacy across all subject areas.

New Assessments Aligned to Maryland's New Standards Implemented Statewide

To assess Maryland's new standards, the State joined the Partnership for Assessment of Readiness for College and Careers (PARCC), a consortium of states working together to develop next generation assessments aligned to the Common Core State Standards.

Hundreds of Maryland educators have been involved in the development and review of PARCC test items. The Maryland State Department of Education (MSDE) and the Local Education Agencies (LEAs) have provided training to schools on administering the computer-based tests (there will also be paper and pencil versions available for the first three years of testing in Maryland) and ensuring that schools have the technical capacity to deliver them online. This year (school year 2014-15), all students in grades 3-8 and

students taking Algebra I, Algebra II, and English 10 will take the PARCC tests for the first time.

New Teacher and Principal Evaluations (TPE) Fully Implemented

New teacher and principal evaluations have been implemented in all 22 LEAs that signed on to participate in Race to the Top. These evaluation systems all include student growth as a significant component of the evaluation rating and utilize multiple measures of teacher and principal performance to drive professional development and foster aligned, purposeful instructional dialogue between teachers and principals, and between principals and their supervisors. All teachers and principals in RTTT-participating LEAs received their first evaluations under the new system at the end of the 2013-14 school year. The development of the new evaluation system was accomplished through a spirit of collaboration among teacher, principal, LEA, and educational stakeholder groups – even signing a Memorandum of Understanding signaling their commitment to this work. MSDE was able to develop an evaluation system that succeeds in measuring student growth, attributing student performance to teachers, and making evaluation fair for every educator. Training and professional development has been provided to educators, principals, supervisors, and LEA leaders on the implementation and sustainability of the evaluations, and MSDE continues to work with these stakeholders to help ensure their success after RTTT concludes. As a result of the new evaluations, teachers know how their instruction is impacting student growth and are receiving professional development aligned to their strengths and weaknesses, as evidenced by the evaluation outcomes.

More and Better Data on Student Outcomes to Improve Instruction

Maryland's new Data Dashboards provide an easy-to-understand view of student, teacher, and school information, which will be used to help enhance and boost education within Maryland. This longitudinal view of data provides a comprehensive view of student performance and outcomes over time, which can be used to inform instruction and policy. The development of the P20 longitudinal data system provides a greater view of student outcomes, from PreK through college and into the workforce. Additionally, LEAs can now successfully and securely transfer data to MSDE, which MSDE can then filter and report in a timelier manner. The statewide electronic transcript system also allows for one central location for transcripts to be gathered within Maryland. LEAs now have access to view all transcripts reported within their LEA by student.

Through the Educator Information System (EIS), the State will be able to review trend data on teacher evaluation and link this data to preparation programs to determine if there are differences in those outcomes for new teachers and their students. This data can then be used to provide feedback to teacher preparation programs to increase their effectiveness and recognize promising practices in teacher education.

Teacher Preparation Programs Strengthened

A number of Maryland's RTTT projects worked to help strengthen the State's teacher preparation programs. Through RTTT, all teacher education initial certification preparation programs will be required to embed within the content of their programs three common program components and ten expectations. This requirement will strengthen the focus of these programs on the needs of high poverty, culturally, and linguistically diverse schools.

MSDE also worked with teacher preparation programs to update the content they present to their students, ensuring that new students in these programs are learning to teach the Maryland College and Career-Ready Standards, and are familiar with the PARCC assessments and new teacher evaluations, including Student Learning Objectives.

Teacher candidates with concentrations in Science, Technology, Engineering and Mathematics (STEM) also increased through RTTT efforts. Each partner preparation program that embedded the STEM Standards of Practice in their teacher preparation program have measured competence and confidence of candidates and reported increased confidence and competence among the candidates in their programs to teach STEM. Project partners report that the integration of STEM in grades PreK-6 will impact opportunities for students to develop the skills and practices to support STEM learning in middle school and high school content areas.

Online Repository for Educational Tools and Resources

To ensure that all teachers have access to instructional tools, resources, and trainings aligned to the Maryland College and Career-Ready Standards, Maryland developed the Learning Management System (LMS) on Blackboard Learn. The LMS provides resources for parents and students to increase their learning and understanding of the State's new standards. Based on survey information, teachers report they are better able to align their instruction to the new standards as a result of the resources found in the LMS. Teachers also feel that as a result of improved and timelier access to data through the Instructional Intervention System they can better differentiate instruction to meet the needs of students. Further, the development of online professional development on educator instructional improvement content allowed teachers to align their instruction to the new standards, increased online professional learning opportunities that provided Continuing Professional Development (CPD) credit, and expanded exposure to the shifts and strategies aligned to the Maryland College and Career-Ready Standards.

Maryland Is a Leader in STEM Education

Maryland continues to be a leader in Science, Technology, Engineering, and Mathematics (STEM) education, having been the first state in the nation to set specific STEM education standards that not only define what makes a STEM proficient student, but also help guide teachers' STEM instruction. Additionally, educators and students now have access to and are utilizing STEM resources that are aligned to the state's mission and vision for STEM.

Ongoing, Individualized Support Provided to the State's Lowest-Achieving Schools

The Breakthrough Center has changed the relationship between the LEAs and the State through its work at both the State and local levels. At the State level, support is no longer isolated and piece meal. With the Cross-Functional Team structure, divisions have improved coordination of support, eliminated duplicative services and requirements, and developed a stronger understanding of what each Division does and is able to provide. Individual projects changed relationships around identifying support, implementing Positive Behavior Interventions and Support (PBIS), working with school support teams, health centers, physical education, working with the 21st Century Community Learning Centers (CCLCs), and with Project Lead the Way Gateway to Technology (PLTW GTT).

Charter Schools Strengthened

Since RTTT began, five new charter schools have opened in Maryland. Six new charter school publications have been developed, which stakeholders can access to gain information regarding all aspects of charter school creation, maintenance, and operation. These publications will help to guide the charter schools' improvement and strategic development efforts going forward.

Question #3: What were the lessons learned from implementing a comprehensive reform agenda?

Over the course of Maryland's Race to the Top grant program, a number of lessons were learned from the successes and setbacks each project encountered.

Involve LEAs from the Start

One lesson learned was that it is critical to work with and survey LEAs and other end users early on to determine exactly what they need and how they will use the systems, tools, resources, training, etc. that the State is developing to provide to them. With this information, project managers will have a better sense of what the LEAs already have in place and what will be most useful to them, prior to starting the project development and/or implementation process, and reduce redundancies.

Another recommendation is to align projects and initiatives with school system priorities. This was found to be exceptionally important to the success of Maryland's programs. Additionally, program components that intentionally involve local school systems in overall program development, delivery, and assessment were successful in aligning programs and key assessments to institutional and State requirements.

Collaboration, Communication, Consistency, and Trust

Another lesson Maryland learned during its RTTT program was the importance of communications and developing strong, collaborative relationships with LEAs and other critical stakeholders, including the state teachers and principals unions, Institutes of Higher Education (IHEs), business partners and internally within the divisions and among the other projects at MSDE. Building trusting relationships at all levels helped to ensure that stakeholders shared in the State's mission and vision for education improvement.

For example, the Teacher and Principal Evaluation (TPE) project team found that a commitment to frequent and totally transparent communications always serves the greater interest of any project. The TPE team worked with LEA and other stakeholder partners to collaborate and foster honest conversations about what was working and what was not, and the strong relationships and sense of trust and openness that the team had developed with these partners gave them the security to change direction when warranted and further deepened the working relationship between the State and its stakeholders.

While MSDE did hold a number of successful statewide convenings for LEA and school staff, holding more of these gatherings, starting earlier in the implementation process, on topics not limited to one project or one sub-criterion would have aided in fostering a deeper understanding of how the State's reform efforts are all connected and provided for more consistency in messaging and understanding. Additional statewide convenings would also be helpful to encourage more cross-LEA dialogue and learning, as well as increase opportunities to build collaboration between LEAs of like size and/or populations to share solutions. Convenings that included more school-level staff and educators would also have been helpful in building the capacity of individual schools to directly implement the State's initiatives and projects – instead of having the information and training come down from the LEA.

Another recommendation to increase buy-in from educators and assist with consistent communications would be to include teachers in the planning, development, and implementation of initiatives and professional learning opportunities. These teachers would then have the knowledge and understanding of these programs that they could share with their fellow teachers and act as an ambassador for the State's reform efforts, because they had a real stake in the development process.

Start Early and Plan for All Contingencies

The four years of Maryland's Race to the Top grant program went by very quickly. Many project managers reported that one lesson they would pass on would be to start everything early, as there are often unforeseen obstacles or setbacks that can significantly impact a project's anticipated timeline. Additionally, Maryland learned that it is imperative to plan extensively for every conceivable contingency. By having contingency plans in place, if or when an obstacle does arise, the project manager already has a plan to address it, and does not set the timeline further off track with the time it would otherwise take to develop a contingency plan at that later point. Overall, the value of intensive project planning and team building cannot be understated.

Track and Measure Progress Throughout

When attempting to evaluate future programs, it will be important to develop a timeline for achieving milestones along the way. It may help to track progress more frequently, and expect successful results in smaller increments. This allows for identifying any possible issues quickly and addressing them in a timely manner to stay on track for the overall project timeline. MSDE also learned that having both internal and external means for determining the quality of project implementation relieves the project from less defensible self-assessments and creates a more authentic method for validating project accomplishments.

Plan to Provide Training on All New Initiatives

Finally, Maryland learned that the Comprehensive Training Plan should have been developed early on in the State's RTTT program and seen as an agency-wide approach to ensure consistency in communications, outreach, and training efforts. Additionally, professional development needs should always be considered when implementing new assessments, curriculum, evaluations, and technology systems and should be part of the conversation at the start of project planning.

Question #4: Looking ahead, what are the next steps for this work?

Sustainability

In addition to the project work Maryland is in the process of completing through its 21 No Cost Extensions (described in detail in the next question), MSDE is focused on transitioning much of the work initiated through its RTTT program to various divisions/staff members within MSDE in order to ensure that the work is sustained after the grant ends. MSDE will continue to provide support to maintain all of the resources created through these projects through budgetary lines within the appropriate divisions.

To sustain the State's LMS, the Division of Curriculum, Assessment and Accountability has hired a permanent Blackboard System Administer to work with curriculum specialists to continue to enhance the curriculum resources on the platform and maintain the modules posted to Blackboard. Content specialists will work with the system administrator to upload additional modules as required.

Teacher Principal Evaluation (TPE) is still a work in progress, as the Maryland College and Career-Ready standards are further implemented and the PARCC assessments are administered. Moving forward, the TPE Team will begin to merge its work on evaluations with the Principals' Pipeline/Governor's Promising Principals' Academy programs. Training current and upcoming school and LEA leaders through these initiatives will provide them with the skills and knowledge to conduct evaluations and help their peers and staff with the evaluation process going forward, sustaining the work from a grassroots level.

Maryland will also continue to work towards improving the distribution of effective teachers and principals through the Equity Plan.

The Elementary and Secondary Education Act (ESEA) Flexibility Renewal Submission is also aligned with the initiatives supported by RTTT.

Ongoing Technical Assistance, Training, and Support

Maryland will continue to share resources developed through RTTT with LEAs, schools, and other stakeholders. The creation of the communication hub and the continuation of updates to the website and the comprehensive training plan will serve to continue to enhance, improve, and disseminate the work accomplished under RTTT.

Additionally, MSDE will continue to train and support end users to ensure effective implementation of the new technology systems developed through RTTT. The State will continue to support LEAs and educators through ongoing professional development and training on the initiatives implemented through RTTT, including the standards, assessments, and evaluations, as well as assisting LEAs in providing professional development to current teachers and principals in low-performing schools to improve effectiveness.

Question #5: If the State has received a no cost extension, what specific work will occur in Year 5?

Sub-Criterion A2: Provide Effective Oversight of the Race to the Top Grant

In Year 5, Maryland will continue its efforts to effectively oversee the State's Race to the Top grant by working with the projects that have No Cost Extensions (NCEs) to provide support and assistance. The State is also in the process of creating the communication hub, updating the MSDE website, and implementing its comprehensive training plan.

The Center for the Application of Innovation in Research Education (CAIRE) is continuing to evaluate the implementation of the College and Career Ready Standards.

Sub-Criterion B2: Developing and Implementing High-Quality Assessments

The completion of the development of instructional assessment tasks, review of the tasks, delivery to MSDE and LEAs, range finding session for instructional assessment tasks, and professional learning webinar for teachers using the tasks are all scheduled to be completed in the NCE Year 5.

Sub-Criterion B3: Supporting the Transition to Enhanced Standards and High-Quality Assessments

Two of eight online STEM courses, Financial Literacy and Foundations of Technology are still under development by the vendors. These two courses will be completed and ready for review between November 2014 and February 2015.

Sub-Criterion C2: Assessing and Using State Data

In order to achieve the overall vision of Race to the Top, the 8/11 (Develop Overall Technology Infrastructure) project team will continue to meet with the LEAs to implement the necessary Infrastructure and security needed within the LEAs.

Sub-Criterion C3: Using Data to Improve Instruction

In Year 5, the C3 projects with NCEs will complete the development of resources, online student modules, and the online instructional toolkit.

Sub-Criterion D2: Improving Teacher and Principal Effectiveness Based on Performance

To advance the work of Teacher and Principal Evaluation in Maryland during Year 5, MSDE will continue to collaborate with the LEAs and provide support and professional development. Additionally, the TPE team will hold its two final convenings of the 2014-15 cohort of the Promising Principals Academy and the final convening of LEA team in support of sustaining TPE.

Sub-Criterion D3: Ensuring Equitable Distribution of Effective Teachers and Principals

MSDE is conducting its final year of project 34/51, which provides incentives to attract and retain highly effective shortage area (STEM, ELL, or special education) teachers at the State's low-achieving schools.

Sub-Criterion D5: Providing Effective Support to Teachers and Principals

The four projects that have NCEs in sub-criterion D5 have all met their goals, but will use the extra year to expand upon the work they did in years 1-4. Through these projects, Maryland will continue to provide support to LEAs and educators in the areas of teacher induction, educator effectiveness, and professional development.

Sub-Criterion E2: Turning Around the Lowest-Achieving Schools

The Breakthrough Center will continue to provide support to low-performing schools, but with a revised service delivery model. Project Lead the Way will continue in Year 5 to expand the program to an additional LEA. Project 46/57 (Extend Student Learning and Improve Culture, Climate, and Support) will work to create a State-level development and implementation team and will work to scale up the current Positive Behavior Intervention and Support (PBIS) implementation.

Sub-Criterion F2: Charter Schools

MSDE staff will continue to provide ongoing technical assistance and best practices to help increase the number of quality charter schools in Maryland.