

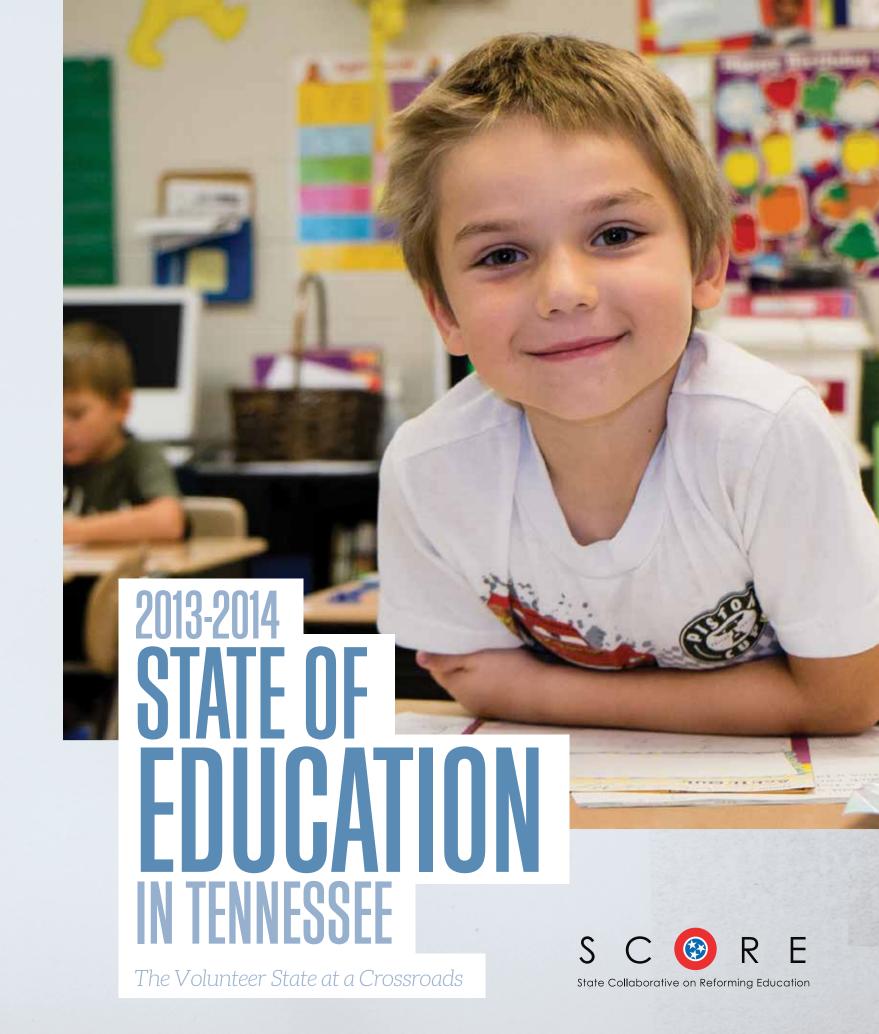
TNSCORE.ORG







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Letter from

The State of Education in Tennessee: The Work in 2013 and Priorities for 2014

Maintaining a Commitment to Rigorous Standards and Assessments

Strengthening Schools through Effective Leadership

Expanding Student Access to Great Teaching Great Teaching

Investing in Technology to

Supporting Students from Kindergarten to Career

LETTER FROM SENATOR BILL FRIST AND JAMIE WOODSON

January 27, 2014

In 2013, Tennessee's work to prepare students for success after high school was put to the test. This test was reflected in a series of questions that we have asked ourselves: Why should we raise the bar academically for students? How do we balance a sense of urgency for our state's and our students' futures with the hard work that is necessary to successfully implement policy? What barriers remain in place as we work to prepare our students for success in the global economy?

When SCORE was launched in 2009, we identified a "once-in-a-lifetime opportunity" for unprecedented growth in student achievement in Tennessee. Over the last several years, the efforts of educators, policymakers, and other stakeholders have helped Tennessee become the fastest-improving state in the nation in terms of student achievement. The gains Tennessee students have made have been significant and are unprecedented in our state's history.

From raising academic standards to developing meaningful educator evaluations, Tennessee has become a national leader in the work to improve student achievement. Our state has passed bold policies to ensure that all students graduate from high school prepared for college and the workforce and has implemented those policies with fidelity. As we move into 2014, it will be important for us to examine the progress we have made and recommit to the important work that is still ahead of us.

While we have made tremendous progress as a state, our work is not done. Student achievement is improving, but this improvement must be sustained and accelerated. To ensure our students continue to grow in 2014, we will need to focus on recommitting to rigorous standards and assessments, strengthening schools through effective leadership, expanding student access to great teaching, investing in technology to enhance instruction, and supporting students from kindergarten to career. We must measure our progress, identify challenges, and make adjustments when needed.

The 2013-2014 State of Education in Tennessee report provides an overview of the academic gains the state has made, examines the work that has contributed to the improvements students have experienced, highlights education priorities for Tennessee in 2014, and provides extensive state and district data. We share this information with the knowledge that our ultimate goal is that every student in Tennessee graduates high school prepared for college and the workforce. It will take the dedication of all partners in the work – from educators and policymakers to parents and students - to help Tennessee reach this goal.

We believe it can be done. Join us in making it happen.





EXECUTIVE SUMMARY

rom parents to policymakers, Tennesseans' continued focus on improving public education is helping ensure students have the best opportunities and brightest futures. While 2013 was, in many ways, a banner year for education in the state, Tennessee is at a unique crossroad.

Tennessee's commitment to improved student achievement – in leadership, policy, and practice – has led to strong early gains for students. Nearly 10,000 more Tennessee students are proficient in Algebra II since 2011, the year that subject became a requirement for high school graduation. Since 2010, an additional 73,000 students in grades 3-8 are proficient in math and an additional 91,000 students are proficient in K-12 math. Importantly, Tennessee reached a significant milestone in 2013. According to the National Assessment of Educational Progress (NAEP) — also known as the Nation's Report Card — Tennessee is the fastest-improving state in the nation in terms of student achievement outcomes across fourth- and eighth-grade reading and math, following only the District of Columbia.

However, work remains to continue on the path that will help all students graduate with the skills and knowledge they need to be competitive with their peers across the state, country, and globe. Data from both national and international assessments show that Tennessee students are significantly behind their peers in academic performance. On the ACT, only 18 percent of all Tennessee students, and 15 percent of public school students, graduating in 2013 met all four college readiness benchmarks (an indication of success in college-level coursework). Tennessee ranks 13th out of 17 states in which more than 75 percent of high school students take the ACT. And while Tennessee made significant gains on NAEP between 2011 and 2013, state scores are still below the national average. On international assessments, Tennessee ranks 67th in reading and 80th in math out of 116 countries and U.S. states.

While challenges exist, the recent progress that Tennessee students have shown on both state and national assessments are proof points of what they are capable of achieving. It is important to continue to build on this success by accelerating academic gains for students, while staying committed to student-centered decision-making at the school, local, and state level. The 2013-2014 State of Education in Tennessee report provides an update on the efforts that have helped our students make significant progress, as well as the opportunities for improvement in five key areas that are crucial to Tennessee's work to improve student achievement in the year ahead. Each of these priority areas are highlighted briefly

below and discussed in detail throughout this report:

- 1. Maintaining a commitment to rigorous standards and assessments
- 2. Strengthening schools through effective leadership
- 3. Expanding student access to great teaching
- 4. Investing in technology to enhance instruction
- 5. Supporting students from kindergarten to career

Tennessee needs to maintain its commitment to rigorous standards and authentic assessments to ensure that students are educated in a way that prepares them for the demands of college and the workforce, both today and in the future. Tennessee's Common Core State Standards are intended to ensure that instruction in classrooms is providing students with the real-world skills needed to succeed in higher education and the workforce, and Tennessee must continue the implementation of these standards. In addition, Tennessee must continue its commitment to implementing the PARCC assessments to ensure that school districts have high-quality assessments that can measure student learning with the Common Core State Standards. Citizens, particularly parents, need to be fully informed about Tennessee's Common Core State Standards and the aligned assessments through PARCC. It will continue to be important to enlist the support of various partners, including business, education, civic, and faith based leaders, to maintain the state's commitment to preparing our students for their future. As Tennessee moves forward in implementing more rigorous standards, a solid foundation in literacy will help student learning across all subjects. Recent results on Tennessee state assessments show that student progress in reading has not been strong. Tennessee's Common Core State Standards provide demanding and rigorous expectations in reading and math. Tennessee must focus not only on implementing the standards themselves but also on proven, research-based strategies that will increase literacy for all students, including English-language

Strengthening schools through effective leadership will help Tennessee continue to implement student-centered initiatives, including efforts to identify and support effective teaching. Tennessee's school principals have vital roles in

improving student achievement, but the work to ensure all schools have effective leaders has continued to lag behind other efforts. More work remains to ensure that principals are receiving the type of training that will prepare them to lead schools and that once they are in those positions they are receiving the supports and continued development they need to succeed. In 2014, there is a need to evaluate principal preparation programs and work to expand the most effective programs. The Tennessee General Assembly should consider mandating an annual evaluation of the principal preparation programs in the state, similar to the statutorily required Report Card on the Effectiveness of Teacher Training Programs. There is also a need to better understand the current conditions of principal evaluation, ongoing development, and support across the state. The Tennessee Department of Education should use emerging research and feedback from the field to both revise the principal evaluation rubric and inform the implementation process. For school leaders, the principal evaluation system must be able to accurately identify strengths and weaknesses of their ability to serve as instructional leaders. Additionally, relationships between school districts and leader preparation programs must be stronger to ensure that the programs are training future leaders with the unique skills and knowledge that districts need.

Expanding student access to great teaching continues to be a key focus for the state. In recent years, Tennessee has taken steps to create a system to identify effective teaching, provide school and district leaders with more accurate information to recognize excellence in teaching, and provide teachers with the supports and feedback they need to improve their instruction. In order to ensure that all students have access to great teaching, efforts are needed to recruit and retain excellent teachers. It is imperative that teachers are provided supports to enable them to be experts in their profession, and the Tennessee Department of Education and local districts should work together to identify gaps in teacher support. Current funds must be strategically invested in initiatives and programs that are having the greatest impacts for teachers, and ultimately students, as identified through research. Additionally, teacher preparation programs should implement more selective admissions processes and rigorous curriculum requirements that prioritize the skills and knowledge teachers need to support students in the classroom. Tennessee's policymakers have also taken steps to determine how to better use public policy to support effective teaching, resulting in changes to tenure, compensation, evaluation, and teacher licensure. It's important that the implementation $% \left\{ 1\right\} =\left\{ 1$ of these policies, as well as future policies enable the state to attract and retain the best teachers.

Investing in technology can enhance instruction and personalize student learning. To realize the full potential of technology, districts and schools need to be equipped with the proper

devices, infrastructure, and training to ensure seamless integration throughout the school day, week, and year. It is important to use technology as a vehicle for quality instruction and content and individualizing student learning. Investing in technology must be an ongoing priority that goes beyond a one-time purchase. Schools and districts should ensure both students and teachers have training and daily access to the different technologies. The upcoming PARCC assessments should serve not just as an end goal but as a catalyst for ramping up technological capacity in districts across the state. But in preparation for PARCC, the Tennessee Department of Education should work directly with districts to aid in implementation. As technology use increases, it is important to have security measures in place that will protect student and teacher information.

Supporting students from kindergarten to career will help ensure Tennesseans have the skills they need to work in the fastest-growing fields in the state, or in any field that they choose. As Tennessee embarks on work to ensure that citizens have the skills they need to work in the fastest-growing fields in our state, the public K-12 education system has an important role to play. To begin with, all high school students should have access to multiple options for rigorous coursework, including Advanced Placement, International Baccalaureate, dual credit, and dual enrollment courses. Additionally, opportunities for students to study STEM subjects (science, technology, engineering, and math) and pursue career opportunities in STEM fields should be expanded across the state. The work to support STEM education in the state must continue to be a priority in the absence of Race to the Top funds. Finally, Tennessee should continue to cultivate a data-driven environment to equip policymakers, superintendents, principals, teachers, and parents with the information and tools they need to advance student learning and success.

Tennessee is at a critical point in its pursuit of a better education system. Student-centered policies, strong state and local leadership, and the commitment and hard work of educators are helping to drive nationally recognized improvements for students. The kind of dramatic transformation that Tennessee has experienced takes persistence and patience. Now is the time to allow these changes to take root and become the new foundation for the schools.

"These historic gains are a result of years of hard work by a lot of people across Tennessee: our teachers, students, principals, superintendents, parents, lawmakers, school board members, business leaders, and many others. As a state we've come together to make education a top priority".

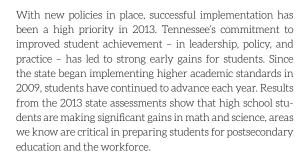
– Governor Bill Haslam, November 7, 2013

THE STATE OF EDUCATION IN TENNESSEE: THE WORK IN 2013 AND PRIORITIES FOR 2014

Tennessee is at a critical point in its pursuit of a better public education system.

Important policy changes have been made over the last few years that focus squarely on academic growth of students,

including higher academic standards, an educator evaluation system that identifies and supports effective teaching, and the ability for the state to intervene in the lowest performing schools, among other efforts. These changes, combined with a focus on successful implementation in schools and communities across the state, are helping to drive improvements in teaching and learning.



Nearly 10,000 more Tennessee students are proficient in Algebra II since 2011, the year that subject became a requirement for high school graduation. Also, since 2010 an additional 73,000 students in grades 3-8 are proficient in math and approximately 91,000 more students are proficient in K-12 math. Importantly, Tennessee reached a significant milestone in 2013. According to the National Assessment of Educational Progress (NAEP)—also known as the Nation's Report Card—Tennessee is the fastest-improving state in the nation in student achievement across fourth- and eighth-grade reading and math, following only the District of Columbia.

While 2013 was, in many ways, a banner year for education in the state, Tennessee is at a crossroad. Work remains to continue on the path that will help all students graduate with the skills and knowledge they need to be competitive with their peers across the state, country, and globe.

Data from both national and international assessments show that Tennessee students remain significantly behind their peers in academic performance. On the ACT, only 18 percent of all Tennessee students, and 15 percent of public school students, graduating in 2013 met all four college readiness benchmarks (an indication of success in college-level coursework). Tennessee ranks 13th out of 17 states in which more than 75 percent of high school students take the ACT. While Tennessee made significant gains on NAEP between 2011 and 2013, state scores are still below the national average. On international assessments, Tennessee ranks 67th in reading and 80th in math out of 116 countries and U.S. states.

While challenges exist, the recent progress shown on both state and national assessments are proof points of what Tennessee students are capable of achieving. It is important to continue to build on this success by accelerating academic gains for students, while staying committed to student-centered decision-making at the school, local, and state level. The following sections of the report provide an update on the progress and remaining areas of work for five key pillars of Tennessee's work to support public education.

There are also specific recommendations for how Tennesseans can help advance the work within each of the following areas: (1) maintaining a commitment to rigorous standards and assessments; (2) strengthening schools through effective leadership; (3) expanding student access to great teaching; (4) investing in technology to enhance instruction; and (5) supporting students from kindergarten to career.

Finally, this report was informed by feedback from educators, students, policymakers, and other Tennesseans. Sources include:

• The 2013 SCORE Leadership Summit, with over 500 participants and 21 small group sessions

Tennessee's Foundation to Improving Student Achievement

The 2007 U.S. Chamber of Commerce report Leaders and Laggards shed light on Tennessee's low academic expectations by highlighting the significant difference between Tennessee's proficiency rates on state assessments compared to national exams. Tennessee had been reporting that close to 90 percent of students were proficient in math and English language arts, while on national exams, approximately 26 percent of students were meeting proficiency standards. Recognizing the need to hold all students to higher expectations, the State Board of Education adopted new standards and graduation requirements through the Tennessee Diploma Project in 2008. The following year, in June 2009, Tennessee's governor and education commissioner joined the Common Core State Standards Initiative, a collaborative plan to develop a set of challenging standards that could be shared across multiple states. In an effort to continue improving the state's education system, the Tennessee General Assembly passed the First to the Top Act (FTTT) in January 2010. The Act established requirements for a comprehensive educator evaluation system that would include student achievement measures, removed restrictions on using student growth data in professional-capital decisions such as tenure and compensation, empowered the state to intervene in the lowest-performing schools, and authorized local districts to adopt alternative salary schedules that best fit their unique needs. In March of that same year, Tennessee was awarded \$501 million dollars through the Race to the Top grant in order to further support the education reform work already underway in the state and priorities established through the FTTT Act. Race to the Top has helped provide substantial resources to jumpstart initiatives and support Tennessee's work to improve student achievement.

- Eight Community Conversations with approximately 500 participants
- Eight in-depth interviews with superintendents and their leadership teams
- Three focus groups with teachers, three with principals, and one with high school students
- 10 interviews with state-level leaders in education
- Input from the Rural Education Network
- Interviews with representatives from three national organizations focused on education reform
- Results from a statewide public opinion survey of 500 registered voters in May 2013

Tennessee's education system and therefore its economic vitality are at an important juncture. The hard work of dedicated educators and parents, accelerated by bold policy decisions, has led to early and significant improvements in student achievement across Tennessee. The ability to ensure an excellent education for all students is the foundation that will continue to support the state's successful future.

MAINTAINING A COMMITMENT TO RIGOROUS STANDARDS AND ASSESSMENTS:

Tennessee's Common Core State Standards and the Partnership for the Assessment of Readiness for College and Career (PARCC)

Overview

Tennessee's Common Core State Standards are a set of academic expectations for math and English language arts that were developed through a state-led process to align student learning with the skills and knowledge needed to succeed in the real world. Since 2011, Tennessee has taken a lead role in one of the two state consortia working to develop assessments that measure student learning aligned to the new standards. As a governing state in the Partnership for Assessment of Readiness for College and Careers (PARCC), Tennessee educators, higher education faculty, and TDOE officials have been helping to develop and review the assessments as well as related policies for implementation. However, there is still work to be done to ensure that all schools are equipped to both successfully teach to the standards and accurately assess student learning and that communities understand the need for higher expectations for all students.

Update on the Work

During the 2011-2012 school year, Tennessee's Common Core State Standards were introduced for kindergarten through second grade. The following year, 2012-2013, all districts began implementing the new math standards in grades 3-8, and 60 school districts chose to pilot the new English language arts standards. The 2013-2014 school year is the third and final year of the implementation transition period. In the 2014-2015 school year, new assessments will replace the state's current English language arts and math tests and will

Instructional Shifts

The goal of Tennessee's Common Core State Standards is to provide a set of rigorous academic standards that will help prepare all students for success after high school. To achieve this goal, teaching and learning includes more critical thinking and problem solving, with students gaining a deep understanding of concepts and then applying them to new, everyday situations. With the emphasis on developing critical thinking, applied knowledge, and problem solving skills, teachers are engaging their students in new ways. These instructional shifts are challenging students with opportunities to think through multiple-solution pathways, show their work, and learn from mistakes. Through mathematical modeling, students are using math concepts to analyze real-world situations and develop informed solutions. For example, students might estimate water and food needs in a disaster area. In other subjects, high school students might analyze historical documents to understand the country's founding, learn how to evaluate the validity of an argument, or conduct research projects that address multiples sides of one issue.

measure student learning with the new standards.

Implementing the standards in the classroom is resulting in new approaches to teaching and learning. In early 2013, the Tennessee Department of Education selected 704 educators through a rigorous application process to serve as Common Core coaches. These coaches went through extensive training in the Spring in preparation to lead five weeks of Common Core training for their colleagues during the Summer.vii As part of the state's First to the Top initiatives, the TDOE provided three-day, hands-on training opportunities for educators to help implement the standards in their schools and classrooms. Through the Common Core coaches, the trainings were peer-led, allowing teachers to learn from and work with other educators in their communities and regions. More than 42,000 teachers attended the state training on the standards between 2012 and 2013. VIII Although this is a substantial number of educators, many teachers have not received the state training. To help reach more teachers, some districts have leveraged their Common Core coaches to provide ongoing guidance and support on teaching the new standards. However, the coaches are not evenly distributed across the state. Forty-two districts—nearly one-third—do not have a coach and 27 districts have only one coach.

The TDOE also provided training sessions specifically for school leaders throughout the Spring 2013. Survey responses from these Tennessee Common Core Leadership trainings show that 96 percent of school leader participants believe

that the new standards will be beneficial to teachers and 95 percent believe they will be beneficial to students $^{\rm ix}$

The work to assess student learning is aligned with the efforts to implement higher standards. During the 2012-2013 school year, local school districts administered constructed response assessments (CRAs) on three occasions (October, February, and May) to help students and teachers prepare for assessments aligned with the new standards. The CRAs provided an opportunity to measure student performance on Tennessee's Common Core State Standards for math through written answers. Results from the May administration show that students consistently scored low on tasks that involved understanding problems and persevering in solving them.* The TDOE also revised the state Writing Assessment to align with Common Core English language arts standards, incorporate key instructional shifts, and help prepare students and teachers for an online format, which is the format in which the PARCC assessment will be given. The writing assessment was administered online in February 2013 for students in grades 5, 8, and 11 (a requirement) and will be an available option for students in grades 3-11 in February 2014. Results from the February 2013 writing assessment indicate that students are general-

ly strong in their ability to write (in terms of style and convention) but have difficultly using sources and evidence from texts in their writing. Districts are using their experiences with these assessments to examine how students perform on more complex assessment tasks and to address areas in need of improvement before implementing a new assessment system that is tied to accountability.xi

Tennessee's new assessments, which are designed to measure whether students are gaining the real-world skills and knowledge that are the foundation of the Common Core State Standards, are being developed by PARCC. PARCC represents one of the two state consortia working to create rigorous assessments to measure student learning aligned to

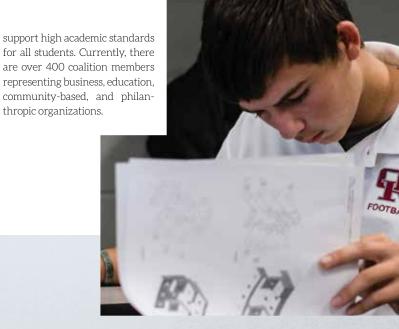
the new standards. As a governing state in the consortium, Tennessee has been involved in the development and review of the assessments as well as related policies for implementation. PARCC assessments will replace the current state tests for grades 3-11 in math and English language arts beginning in the 2014-2015 school year. In addition, the PARCC exams for 11th grade will be used as a college readiness indicator; both public university systems in Tennessee-the Tennessee Board of Regents and the University of Tennessee System-will use PARCC results to determine whether or not an incoming freshman will require remedial coursework. In preparation for full implementation of the new assessments, PARCC will be conducting a pilot during Spring 2014. The pilot will provide the consortium with information about the specific test questions and format, but can also help schools and districts prepare for test administration.

The Tennessee Department of Education maintains the website, www.tncore.org, which provides up-to-date information

on Tennessee's Common Core State Standards and PARCC assessments. Educators can access all materials from past training sessions on the site. The TDOE also sends out frequent TNCore email updates to direct educators to new information and resources that are updated regularly. The Expect More, Achieve More Coalition is a statewide alliance of organizations in Tennessee that is working together to actively

Authentic Assessments: Measuring Student Progress

As Tennessee implements more rigorous standards, new assessments are needed to accurately measure whether students are gaining the real-world skills and knowledge that are the foundation of the Common Core State Standards. The multiple-choice format of the state's current TCAP tests can lead to results that measure test-taking skills rather than the application of knowledge. High-quality assessments should be part of a rigorous curriculum, not an additional burden to instruction, and the tests should be able to measure student learning across a full range of content standards. To achieve these goals, tests should include questions that will require students to engage in a variety of tasks such as writing, recall, abstract thinking, and investigation. The adoption of a common set of standards by the majority of states has created a unique opportunity for states to work together and leverage their resources to create high-quality assessments that can also be shared.





The state must stay the course in the continued implementation of the Common Core State Standards.

Priorities for 2014

Tennessee's success rests on the ability to compete in a global economy. It is critical that we educate students in a way that prepares them for the demands of the workforce both today and in the future. Tennessee's Common Core State Standards are intended to ensure that instruction in classrooms across the state is providing students with the real-world skills needed to succeed in higher education and the workforce. Along with implementing higher standards in the classroom, families need to have access to accurate information about the standards, including what they are, what they are not, and how to support students at home. In addition, it is important to engage citizens within communities across the state in conversations about the need to have high expectations for all students. Tennessee's commitment to high standards ensures that we are putting our students on the pathway to success - a pathway that demands rigor, critical thinking, and strong aptitudes in reading, math, writing, and the sciences.

1. Tennessee must continue its commitment to hold high expectations for all students through the Common Core State Standards. Tennessee is leading the nation in the work to raise academic standards, helping to ensure all students are prepared for success after high

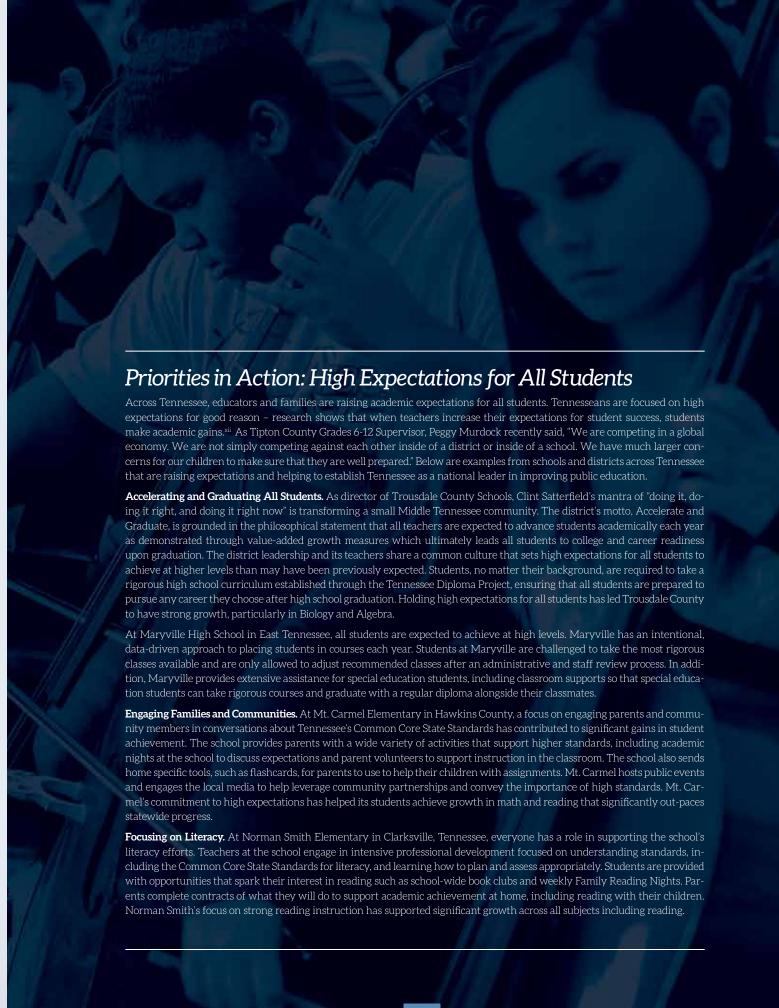
school. In raising academic expectations, Tennessee is holding students to a nationally competitive standard. The state must stay the course in the continued implementation of the Common Core State Standards.

2. Tennessee must continue its commitment to implementing the PARCC assessments to ensure that school districts have high-quality assessments that can measure student learning with the Common Core State Standards. Measuring student success with higher standards not only shows whether the students are meeting the new standards, but is also a precursor to informing more effective instruction.

3. Citizens, particularly parents, need to be fully informed about Tennessee's Common Core State Standards and the aligned assessments through PARCC. It will continue to be important to enlist the support of various partners, including business, education, civic, and faith-based leaders, to maintain the state's commitment to preparing our students for their future. As students begin taking the PARCC tests, proficiency levels may drop initially because the tests will be more challenging. There needs to be clear

communication that a decline in proficiency rates is a reflection of raised expectations to ensure all students are prepared for college and career.

4. As Tennessee moves forward in implementing more rigorous standards, a solid foundation in literacy will help student learning across all subjects. Recent results on Tennessee state assessments show that student progress in reading has not been strong. Tennessee's Common Core State Standards provide demanding and rigorous expectations in reading and math. Tennessee must focus not only on implementing the standards themselves but also on proven, research-based strategies that will increase literacy for all students, including English-language learners. These strategies include a focus on reading in grades K-3, additional instructional time spent on reading in all grades, and ensuring that educators are using the most effective strategies in reading instruction. Even though an intentional focus on literacy is critical to student success. leaders should be cautious to not lose the current focus and momentum on increasing achievement in math and science.



STRENGTHENING SCHOOLS THROUGH EFFECTIVE LEADERSHIP:

Principal Preparation, Evaluation, and Ongoing Training

Tennessee has taken important steps regarding teacher development and support, yet the work to support school leaders has continued to lag behind.

Overview

School leaders play a critical role in student learning and are second only to teachers in terms of the inschool factors affecting student success.xiii While research has found significant connections between high-quality school leadership and positive student achievement outcomes, there is work to do to identify the characteristics and specific skills that principals need to best serve their schools.xiv Tennessee has taken important steps regarding teacher development and support, yet the work to support school leaders has continued to lag behind. Some progress has been made, however. The State Board of Education passed the Learning Centered Leadership Policy in 2008 in order to build a "comprehensive system of instructional leadership training, development, licensure, and evaluation."xv The Tennessee Instructional Leadership Standards (TILS) that provide the foundation for this work were revised in 2013 to reflect current research and practices. Both districts and principal training programs should be working to align their practices to these evidence-based

leadership standards to ensure principals have the support and resources they need. In 2014, there is a need to evaluate principal preparation programs and work to expand the most effective programs. There is also a need to better understand the current conditions of principal evaluation, ongoing development, and support across the state.

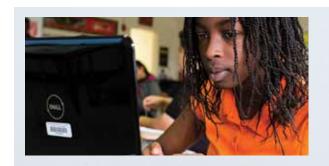
Instructional Leadership

The role of the principal has evolved from building manager to instructional leader. School leaders set the culture and expectations within their schools, and are critical to both student and teacher success. The principal also needs to cultivate a

strong instructional leadership team by tapping into the expertise of effective teachers. As one director of schools in Tennessee explained, "The days of just running the school and making sure the doors are open and the kids have books are long gone. You can't be a principal anymore the way you may have been taught 20 or 15 years ago. It's a whole new ball game."

As outlined in the Tennessee Instructional Leadership Standards, an ethical and effective instructional leader: a) facilitates professional practice that continually improves student learning; b) collaborates with stakeholders to create and sustain an inclusive, respectful and safe environment conducive to learning and growth for all; c) develops the capacity of all educators by designing, facilitating, and participating in collaborative learning informed by multiple sources of data; and d) facilitates the development of a highly effective learning community through processes that enlist diverse stakeholders and resources.

Source: http://www.state.tn.us/sbe/2013_documents/February2013_Board_Meeting/ III_F_Revision_of_the_Tennessee_Instructional_Leadership_Standards_Attachment.pdf



Update on the Work

Identifying and training future school leaders is an important first step to ensuring the state has effective leadership in every school. School districts and principal preparation programs are required by the Learning Centered Leadership Policy to work together to select, train, and place school leaders. The partnership is meant to be "a dynamic collaborative effort" that leverages local needs and emerging research on exemplary leaders to "identify and secure candidates for instructional leadership.xvi Although partnership agreements were written in accordance with the policy, it is unclear whether they have been successfully implemented in practice. In an effort to evaluate the effectiveness of the principal training programs in the state, the Tennessee Higher Education Commission has plans to produce a report similar to the Report Card on the Effectiveness of Teacher Training Programs. While there had been initial plans to release both reports in November 2013, the report card on principal training programs has been delayed. Currently, there is not an accurate way to evaluate the quality of the preparation that principals receive, which limits the ability for programs to make necessary improvements.

In October 2013, Governor Bill Haslam announced the state's plan for a new principal preparation program to help build a pipeline of effective school leaders across the state. He stated, "Successful organizations have great leaders at the top, and one of the most important things we can do to transform our [schools] is to have each one led by a great principal." The state will partner with Vanderbilt University and local school districts to select and train up to 30 school leader candidates a year. Districts will be responsible for nominating potential participants and providing school-based clinical experiences as part of the training. *vii This initiative has helped elevate the conversation about the importance of training school leaders, but the work has only just begun.

There are examples of local initiatives aimed at building a pipeline of highly trained and effective principals. For instance, Hamilton County recently launched a comprehensive leadership pipeline plan to support the development of strong instructional leaders who can truly transform the local education system. The plan focuses on leadership recruitment, preparation, placement, and support.xviii

Some districts have set the expectation that principals must be instructional leaders and have been more intentional about where principals are placed. Other districts have allocated portions of their Race to the Top funds to help administrators understand how to use data to support student learning. For

example, some districts are using Common Core leadership coaches to provide training for administrators to help them better evaluate and support teachers. However, these examples result in only pockets of success.

The Tennessee Department of Education has been working to provide support to school and district leaders across the state.

The TDOE offered day-long Common Core Leadership Training courses from January through May 2013 specifically for principals, assistant principals, and district supervisors. The training, which was optional and free of cost for schools and districts, focused on Tennessee's Common Core State Standards in math and English language arts, as well as readiness for PARCC. The sessions were led by Common Core leadership coaches and current, high-performing Tennessee school and district leaders. Participants indicated through surveys that they enjoyed learning from their peers who were currently engaged in similar work. Survey responses also show that while principals feel that the TDOE's training helped them better understand the Common Core State Standards, more training and support is still needed.xix The TDOE also partnered with New Leaders for New Schools to provide superintendents with hiring and selection tools for principals.

The TDOE's Centers of Regional Excellence (CORE) offices have been instrumental in providing supports to schools and districts across the state. According to a Tennessee di-



One of the most important things we can do to transform our [schools] is to have each one led by a great principal.

focus groups with principals across the state during Spring 2013, SCORE heard consistently that principals wanted more opportunities to collaborate with their colleagues in other districts. The CORE offices are working to provide opportunities for school leaders to work together across districts through the principal collaborative initiative. Additionally, the TDOE plans to use the CORE offices to provide support for the implementation of the principal evaluation system.

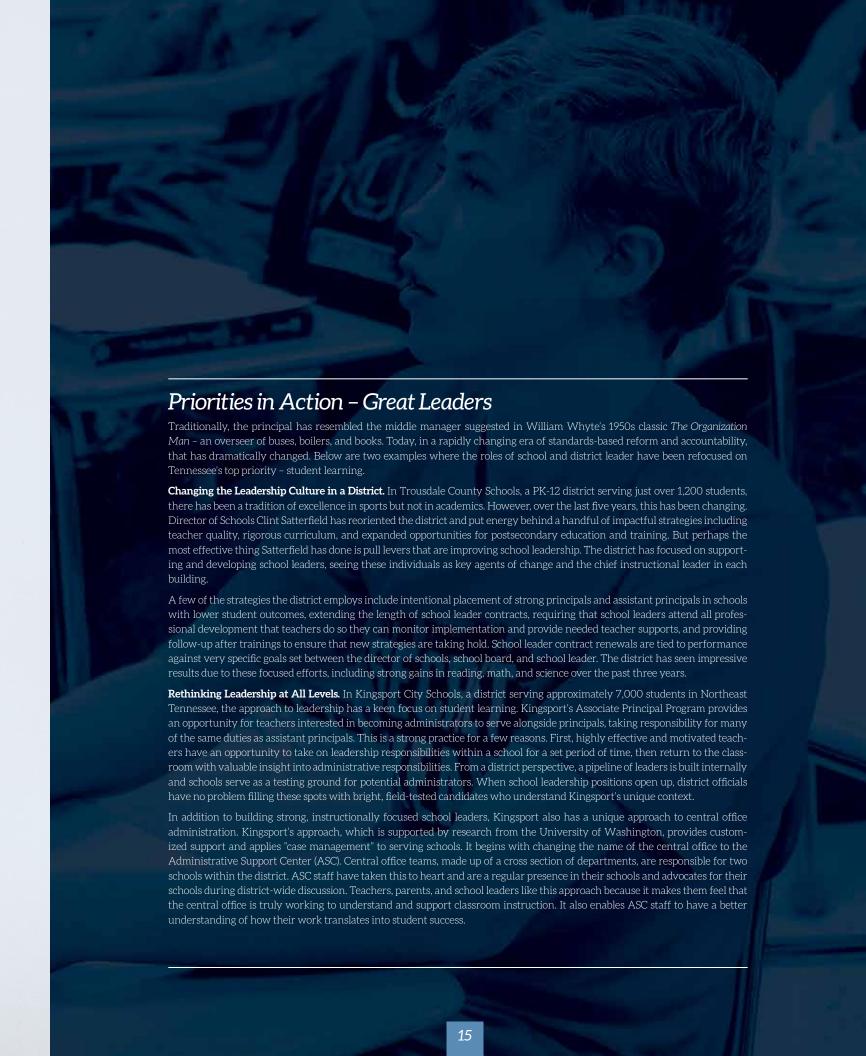
As part of the 2010 First to the Top Act, all public school principals in Tennessee are required to have annual performance evaluations. Fifty percent of the overall evaluation score is based on qualitative measures, 35 percent is based on schoolwide academic growth measures, and 15 percent is based on student achievement measures. The Tennessee Department of Education is currently piloting a revised principal evaluation tool during the 2013-2014 school year and will make revisions based on the results of the pilot, as well as recommendations from the Administrator Evaluation Advisory Council. The current rubric to measure qualitative standards was informed by the revised Tennessee Instructional Leadership Standards (TILS), which "identify core performances of effective instructional leaders."xx The TILS were developed and refined using best practices, current research, and the experiences of Tennessee educators. The revised standards are a promising step toward an improved principal evaluation system, but it is critical that districts have the supports and resources they need to fully implement the tool and use results to drive improvement.

Priorities for 2014

As Tennessee continues to implement student-centered initiatives, including the new teacher evaluation system and Tennessee's Common Core State Standards, it is crucial to have strong instructional leadership in every school. As Tennessee Commissioner of Education Kevin Huffman remarked in 2013, "Training educators to be future leaders is one of the most important things we can do to ensure the sustainability of our work. Having effective principals and district leaders in place will make sure our efforts to improve education continue to pay off many years down the road." In order to build a pipeline of strong leaders, the focus should be on creating an aligned, rigorous system for recruiting, training, evaluating, and providing ongoing support to school leaders. Significant

work remains to ensure that prospective principals receive the quality of training that will prepare them to lead schools and to ensure that principals placed in leadership positions receive the supports they need to rise to these new expectations. Progress is the following areas must be made in 2014:

- 1. Principal preparation programs should have rigorous selection processes and curriculum requirements that prioritize the skills and knowledge that instructional leaders need. Further, the Tennessee Department of Education and the Tennessee Higher Education Commission should work together to measure the effectiveness of the state's principal training programs and ensure that this data is both publicly reported and used for program accountability. The Tennessee General Assembly should consider mandating an annual evaluation of the principal preparation programs in the state, similar to the statutorily required Report Card on the Effectiveness of Teacher Training Programs. Once identified, the most effective programs and practices should be expanded across the state.
- 2. Relationships between school districts and leader preparation programs must be stronger to ensure that the programs are training future leaders with the unique skills and knowledge that districts need. Local ownership and implementation of initiatives to support school leaders will be critical moving forward.
- 3. The TDOE should use emerging research and feedback from the field to both revise the principal evaluation rubric and inform the implementation process. The principal evaluation system must be able to accurately identify strengths and weaknesses of leaders' ability to serve as instructional leaders. It will be important for state and district leaders to remain committed to the continuous improvement of this system. Additionally, principals should be given targeted feedback through the evaluation system that will help identify professional learning opportunities to improve their practice.
- 4. There is a need for a comprehensive study on Tennessee's school leadership pipeline, including selection, preparation, evaluation, and ongoing development and support. The focus on instructional leadership is especially important in the context of the need to sustain the momentum for positive change in the state's public education system. Examining current practices in the state can help inform the specific steps that need to be taken to make improvements.



EXPANDING STUDENT ACCESS TO GREAT TEACHING:

Teacher Preparation, Evaluation, and Ongoing Support

Overview

Tennesseans hold high expectations for their educators. Teachers are expected to improve student achievement each year while responding to the individual learning needs of all students. Throughout 2013, the Tennessee Department of Education, local school districts, and research- based advocacy organizations have continued to focus on the importance of fostering effective teaching. Expanding student access to great teaching begins with recruiting intelligent, talented candidates into the profession and providing rigorous training programs that prepare them to meet the demands of today's classrooms. Once in the classroom, teachers need opportunities for ongoing professional learning and support, which should be informed by the results of a meaningful educator evaluation system. While progress has been made in improving teacher evaluation and providing high-quality training on Tennessee's Common Core State Standards, there is still work to do to ensure these efforts produce educational improvement for students.xxii

Update on the Work

By the end of the 2012-2013 school year, the Tennessee Department of Education (TDOE) completed transitioning the Field Services Centers into the Centers of Regional Excellence (CORE). The new CORE offices are focused on provid-

state that they relied on support from the CORE offices and appreciated having a local contact with the TDOE. Each office has instructional academic specialists charged with helping districts improve classroom instruction and implement the Common Core State Standards. Because the CORE offices are regional service agencies, they can provide opportunities for educators to collaborate with their colleagues across multiple districts. While the CORE offices have been an asset to the districts, there are ongoing capacity challenges due to a relatively small staff serving multiple districts in one region. Each of the eight CORE offices has approximately 10 staff members and serves an average of 15 districts.

The TDOE offered comprehensive, high-quality profession-

ing direct support to teachers as well as school and district

leaders. SCORE heard consistently from educators across the

The TDOE offered comprehensive, high-quality professional development for educators on Tennessee's Common Core State Standards in Summers 2012 and 2013. ("See Maintaining a Commitment to Rigorous Standards and Assessments" in this report for more information.) In addition, the TDOE hired and trained more than 700 educators to serve as Common Core coaches to their peers across the state. While an unprecedented number of teachers have received this state-funded support, not all educators attended the summer trainings, and about one-third of the districts (over 5,000 teachers) do not have a Common Core coach. For example, in the northwest region of the state, half of the districts (over 1,000 teachers) do not have access to a coach.

Refinements continue to be made to Tennessee's teacher evaluation system. Since the First to the Top Act of 2010 established requirements for an educator evaluation system, the state has continued to improve upon the Tennessee Educator Acceleration Model (TEAM) which is used for about 80 percent of teachers in the state. In the original legislation, 50 percent of an educator's evaluation is based on stu-

dent performance, and 35 percent is derived from measures of learning growth, based on the Tennessee Value-Added Assessment System (TVAAS) where available. New legislation passed in 2013 made two key changes regarding the use of TVAAS data. For educators relying on school-wide TVAAS data, the weighting has been reduced to 25 percent. In addition, districts now have the discretion to allow educators with individual TVAAS scores of a four or a five to use that score for 100 percent of their overall evaluation.

Since not all teachers have individual growth scores, the TDOE has been working with educators and content experts to develop growth measures for specific areas including career and technical education, fine arts, world languages, and early grades. XXXIII The new measures used in the 2012-2013

school year increased the total percentage of teachers with individual growth data from about 30 percent to just over 50 percent. While this is an improvement, the TDOE estimates that approximately 70 percent of teachers could have growth measures in 2013-2014 if all districts elect to use all approved measures. The TDOE has also used feedback from educators to fine-tune the observation rubric for the 2013-2014 school year to ensure alignment with Tennessee's Common Core State Standards. Furthermore, districts using one of the approved alternative models of teacher evaluation are also working to assess and improve those evaluation systems. **xxiv**



Professional learning should increase educator effectiveness and results for all students. Educators use professional learning opportunities as a way to continually expand their knowledge and skills so that they can best serve their students. For professional development to be effective, it needs to be thoughtfully planned and executed to ensure it is resulting in improved instructional practices. Additionally, professional learning should be job embedded and individualized for the individual and/or team of teachers. The Tennessee State Board of Education adopted Learning Forward's Standards for Professional Learning in 2012, which establish the following as essential elements of professional development:

1) Learning communities committed to continuous improvement, collective responsibility, and goal alignment.

2) Leadership that develops capacity, advocates, and creates support systems for professional learning.

3) Resources that have been prioritized, monitored, and coordinated for educator learning.

4) Data that are used to plan, assess, and evaluate professional learning.

5) Learning designs that integrate theories, research, and models of human learning to achieve intended outcomes.

Many educators across the state have begun praising the new evaluation models for initiating meaningful conversations about classroom instruction and identifying specific areas to improve. The Tennessee Consortium on Research, Evaluation, and Development (TN CRED), which provides external research and evaluation on Tennessee's First to the Top initiatives, released a report in 2013 based on educator feedback. The results related to teacher evaluation reflect what many educators and policymakers have been hearing in the field – teachers are more satisfied and comfortable with the system than they were in 2012. According to TN CRED's report:

"Teachers in 2013 were more likely than teachers in 2012 to perceive the feedback from teaching observations to be more focused on helping them improve their practice than on judging their performance."xxv While there has been improvement over the last year, the report also shows that 50 percent of educators are not satisfied with the teacher evaluation system. In examining feedback from districts using the state TEAM model, as well as districts using the alternative models, TN CRED found that teachers had consistently more favor-

6) Implementation that applies research on change and sustains support for long-term change.

7) Outcomes aligned with educator performance and student curriculum standards.



Teachers must have access to instructional coaching, collaborative planning time, and targeted professional learning.

budgets, and funding levels as they determine compensation plans to meet local needs.

to reexamine existing resources,

The revised educator licensure policy seeks to streamline the process for educators to renew and advance their licenses. The policy also introduces more rigorous entry requirements, reduces the duration of a license and connects advancement and renewal to a minimum level of performance on the teacher evaluation system. Under the new policy, teachers

will begin with a practitioner license, valid for three years, and advance to a professional license, valid for six years, provided they meet minimum performance expectations. Those meeting the minimum performance expectations will have their license automatically renewed. The policy is scheduled to take effect August 1, 2015. The State Board of Education plans to use the interim time to study the policy and consider feedback to improve the system.xxxii This interim period is an opportunity for educators and district leaders across the state to engage in the policy conversation about licensure and contribute ideas for continuing to improve the process.

able views if they were using one of the alternative models. The Tennessee Department of Education plans to continue to examine the data and use educator feedback to inform ongoing improvements.xxvi

As part of the state's efforts to improve and connect different aspects of the teaching profession, the State Board of Education (SBOE) revised policies in 2013 related to teacher compensation and educator licensing. By streamlining the state minimum salary schedule and broadening differentiated pay plan guidelines required by Tennessee Law, the revised compensation policies provide local districts with additional flexibility in determining criteria for educator pay. These changes support Tennessee's efforts to encourage school districts to move away from a one-size-fits-all approach to professional capital decisions and develop new and innovative ways to support effective teaching. Differentiated pay plans allow districts to align resources with local goals and priorities for improving student achievement. This will require districts

Initiatives are under way to strengthen teacher preparation programs and ensure that pre-service teachers are prepared to be successful in today's classrooms and schools. Since 2010, the Tennessee Higher Education Commission (THEC) has been working to improve the reporting system and use available data to evaluate teacher preparation programs. The annual Report Card on the Effectiveness of Teacher Training Programs provides outcome-based information, including placement and retention rates, Praxis scores, and value-added data for the traditional and alternative preparation programs in the state. The 2013 report also included trend data for the first time, highlighting the programs with consistent positive value-added results, as well as those with consistent negative results over the last three years. Interviews with leadership teams from select districts in Tennessee revealed that districts are incorporating data from this report in their recruitment and hiring processes. However, there is no formal process by which the data is used as part of program improvement or

While the public report provides general information on the performance of program graduates, many training programs need more detailed information to target areas for improvement. To that end, THEC contracted with the organization that conducts the state's value-added analysis (SAS, Inc.) to create in-depth analytic reports on each training program. The reports are due to programs in early 2014. THEC has also partnered with the Ayers Institute for Teacher Learning and Innovation at Lipscomb University to develop courses and instructional materials for the preparation programs to use for teaching Tennessee's Common Core State Standards. In Spring 2013, more than 500 higher education faculty members received training on these modules at five trainings across the state. Many programs are also integrating the Tennessee Educator Acceleration Model (TEAM) evaluation into their student teaching placements to better align the student teaching experience with that of the classroom teacher. Finally, SCORE heard in focus groups and interviews with school and district leaders that more work is needed to ensure candidates graduating from teacher preparation programs are better prepared to meet the new expectations.







Priorities for 2014

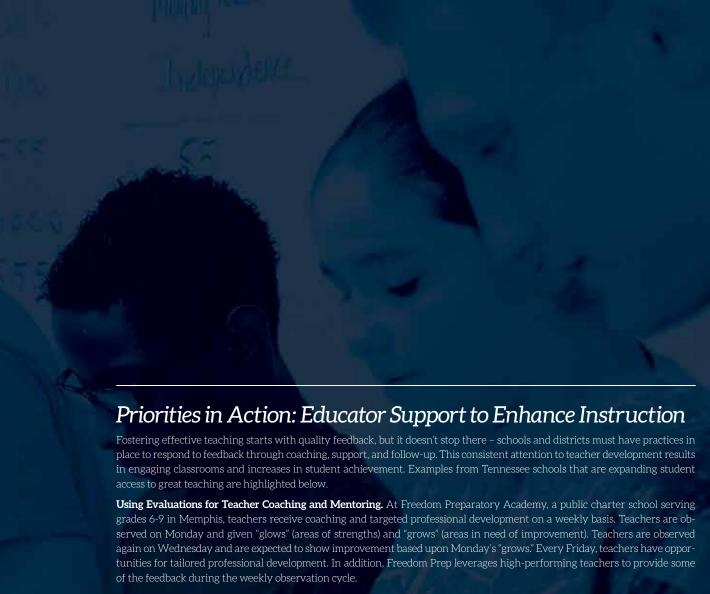
Perhaps the most critical component of student success is access to effective teaching. To ensure that all students have this opportunity, efforts are needed to better support both current and future teachers. In recent years, Tennessee has taken steps to create a system to identify effective teaching, provide school and district leaders with more accurate information, and provide teachers with the supports and feedback they need to improve instruction for students.

- 1. It is imperative that teachers are provided with the tools and resources that will enable them to be experts in their profession. The information and research available about effective ways to support teachers must be used to foster excellent teaching in every school across the state. Teachers must have access to instructional coaching, collaborative planning time, and targeted professional learning. Further, all districts should ensure that their teachers have the supports they need to teach the Common Core State Standards.
- 2. Local ownership and implementation of initiatives to support teachers will be critical moving forward. Districts should create, as well as protect, time and opportunities throughout the academic year for high-quality professional learning that increases educator effectiveness and results for all students. Current funds need to be strategically invested in those initiatives and programs that have the greatest impacts for teachers, and students, as identified through research.
- 3. The Tennessee Department of Education and local



help assess district needs and develop strategic plans to ensure teachers have access to individual support and professional learning. This is particularly important in light of the fact that nearly one-third of districts do not have a Common Core Coach.

- 4. Developing a pipeline for excellent teaching must be a priority for the state. Districts and teacher training programs should work together to recruit more high-quality candidates into the profession and ensure that candidates are fully equipped to help students achieve at high levels. This work can be supported through efforts to:
- Help teacher preparation programs implement more selective admissions processes and rigorous curriculum requirements that prioritize the skills and knowledge teachers need to support students in the classroom:
- Use data to enhance teacher preparation program improvement and accountability;
- Develop two-way partnerships between K-12 and higher education to develop the supports needed by both pre-service and in-service teachers.
- 5. Tennessee's policymakers have also taken steps to better use public policy to support effective teaching, resulting in changes to tenure, compensation, evaluation, and teacher licensure. It is important that the implementation of these policies, as well as future policies enable the state to attract and retain the best teachers. The state must:
- Support districts in using the new teacher evaluation process to drive professional capital decisions, as well as inform improvements in instruction and professional learning;
- Continue to prioritize development of individual growth measures for as many teachers as possible, especially as growth measures play an important role in Tennessee's teacher evaluation system;
- Provide guidance to districts on how to use the flexibility of the compensation system to benefit teachers and ultimately students:
- Ensure the process that the State Board of Education uses to review the new licensure policy is robust and offers opportunities for multiple sources of feedback;
- Empower districts to use the evaluation process and new tenure policy to ensure that low-performing teachers who do not improve over time do not remain in the classroom



At Norman Smith Elementary in Clarksville, Tennessee, school leaders use evaluation and student performance data to create a cadre of mentors and coaches within the school. First-year teachers are paired with a highly skilled mentor teacher who provides support and instructional coaching. Norman Smith also intervenes when any teacher in the building struggles, providing an instructional coach who will model lessons, observe the teacher trying out new strategies, and provide feedback. Teachers also participate in weekly collaborative planning with the academic coach and administration. As specific curriculum needs arise, "Just in Time" trainings are provided.

Engaging, Relevant, and Rigorous Classroom Instruction. At Rose Park Math and Science Magnet, a school that serves grades 5-8 in Nashville, effective teaching means students are actively engaged in instruction. Teaching and learning at Rose Park looks very different - students present their ideas, justify their thinking with explanations, and critique the reasoning of others with teachers serving the role of facilitator while assessing student knowledge. Students engage in critical thinking, problem-solving, and real-world application. School leaders are in classrooms every day to assess the extent to which this kind of teaching and learning is occurring. Rose Park also leverages community resources to provide engaging instruction to students. Through a partnership with Vanderbilt University, each grade level has a Scientist-in-the-Classroom who co-teaches the class once a week to provide students with high-quality, hands-on learning activities that are standards-based.

In Kingsport City Schools, a PK-12 district serving slightly more than 7,000 students in Northeast Tennessee, rigor is expected across every grade level and subject in each of the 13 schools. Superintendent of Schools Dr. Lyle Ailshie recently said, "We can't afford to have random acts of greatness, but greatness everywhere, every day." The district's goal of greatness in every building is achieved in part by the use of teacher leaders. Kingsport has teacher leaders who model lessons, provide coaching, create common assessments, and mentor teachers throughout the district. In addition, schools have worked to reduce the course loads of teacher leaders to enable them to support their colleagues. Teacher leaders in Kingsport have deep expertise in the subject areas that they focus on and, in many cases, are Common Core coaches. This teacher-led approach to support and coaching not only leads to rigorous, aligned instruction across the district, but it also assists in the deployment of a distributed leadership model that drives innovation.

INVESTING IN TECHNOLOGY TO ENHANCE INSTRUCTION:

Providing Students with the Tools to Succeed

Overview

Tennessee has an unprecedented opportunity to leverage technology to transform education and prepare students for success in college and the workforce. Schools and districts are investing in technology and working to upgrade their current infrastructure and devices to not only meet the requirements of new online assessments but more importantly to enhance teaching and learning. As a representative from the Tennessee Department of Education (TDOE) explained, "Investing in technology is not about putting new toys in

the classroom. It needs to be about providing assistive technology that will enhance both the delivery of instruction and the ability for students to learn." The TDOE has been working with districts to assess current needs and to help make a successful transition to the new Common Core State Standards-aligned tests that will be administered online. However, it is unclear whether districts are prepared to administer online tests, and whether teachers and students are adequately prepared to use new technology to truly enhance learning.

Update on the Work

Throughout 2013, school districts have been assessing their current technology systems and determining what improvements need to be made. A driving force behind this

work has been the state's plan to administer online assessments in the 2014-2015 school year. As part of the transition to higher expectations through Tennessee's Common Core State Standards, the state will assess student learning in math and English language arts through PARCC assessments. (See "Maintaining a Commitment to Rigorous Standards and Assessments" for more information about PARCC.) The state's efforts to help districts transition to the online assessments include targeted assistance from the TDOE, as well as \$51 million in the state's 2014 budget toward technology for school districts.

The PARCC assessments are being designed to leverage technology so that the tests complement, enhance, and accurately measure student learning. Districts have been working –

with guidance from the TDOE and PARCC – to upgrade their technology infrastructure and Internet bandwidth to ensure that they are ready for online assessments by the 2014-2015 school year. While a paper and pencil version will be available to districts, at least during the first year, there are many benefits to using the online version, including potentially faster results, more dynamic and interactive test questions, and lower cost.

The TDOE administered a survey to districts in October 2013 to help assess their readiness for online PARCC assessments.

The Power of Technology

Schools are using technology to enhance teaching and learning through a variety of ways to achieve multiple goals, including:

- **1. Expanding access:** Students receive the opportunity to engage with technology and develop digital skills they may not otherwise develop and will need in college and career.
- **2.** Engaging students: Various devices provide students the opportunity to learn through multiple pathways and invite students to engage with the teacher and each other.
- **3. Personalizing instruction:** Online or computer-based learning can be used to provide opportunities for rigorous learning, differentiated learning, and remediation.
- **4. Supporting educators:** Online resources can be used to provide professional development and facilitate professional learning communities.
- **5. Using data:** Technology can provide immediate feedback on student performance that can help teachers and parents identify individual student progress and specific needs.



Districts were provided with their status (red, yellow, green) and initial assistance as needed. Looking ahead to 2014, the TDOE plans to provide further assistance to districts through the Centers of Regional Excellence offices. Additionally, the TDOE's work to administer constructed response assessments, as well as online writing assessments provided districts with practical experience. A priority during this transition will be to ensure the new assessments measure content knowledge rather than students' technological skills.

Investing in technology is not just about preparing for a new assessment system,

but about utilizing technology that enhances the classroom experience. For example, STEM School Chattanooga, L&N STEM Academy in Knoxville, and Innovation Academy in Kingsport have a one-to-one technology structure, providing all students with iPads to use both inside and outside the classroom. The iPads are used to facilitate a flipped classroom structure, in which students use their time out of class to study material and then devote classroom time to practicing and mastering concepts. Computer labs and iPads are also used as part of a blended learning approach, which helps students use technology to enhance their access to content, use of the content, and ultimately application of the content. Both L&N STEM Academy and Innovation Academy have earned the honor of Apple Distinguished School or Program, by providing all students, teachers, and administrators with comprehensive school-wide access to mobile devices and computers and by demonstrating an innovative learning environment that engages students and provides tangible evidence of academic accomplishment.xxviii

Technology is also being used to expand opportunities for students to take academically rigorous courses. The Northeast Tennessee College and Career Ready Consortium (NET-CO), formed by the Niswonger Foundation in 2010, is a network of 29 high schools and five colleges and universities across 15 counties that has invested in and leveraged technology to increase student access to rigorous courses, such as Advanced Placement. The Advanced Placement teachers use audio-video equipment to live-broadcast their lessons to students in other high schools, while facilitators in the remote classrooms supervise the learning that takes place. In the 2012-2013 school year, more than 10,000 students were

Investing in technology is not just about preparing for a new assessment system, but about utilizing technology that enhances the classroom experience.

enrolled in online, distance learning, Advanced Placement, or dual enrollment courses through NETCO.xxix

While technology is emerging as an effective strategy to enhance teaching and learning, many schools and districts face challenges related to equipment, infrastructure, and adequate training for students and educators. There is variability across the state in terms of technological capacity. Even some districts that are more technologically prepared have expressed concern about their ability to accommodate whole-school online testing. An underdeveloped infrastructure limits the extent to which technology can be used to meet additional school and



Technology devices as educational tools are as critical today as paper, pencils, and encyclopedias have been in the past.



Priorities for 2014

Technology can be a powerful education tool to enhance instruction and personalize student learning. To realize the full potential of technology, districts and schools need to be equipped with the proper infrastructure, devices, and training to ensure seamless integration throughout the day.

- 1. It is important to use technology as a vehicle for quality instruction and content and for individualizing student learning. The upcoming PARCC assessments should serve not just as an end goal but as a catalyst for ramping up technological capacity in districts across the state. All Tennessee students should have access to the types of opportunities and advancements that technology can offer.
- ongoing priority that goes beyond a one-time purchase. Students need daily access to technology and should be trained to use it. Teachers also need





training and daily access to technology. It is critical that educators understand how to use technology to improve instruction and transform how students learn. Fostering strong relationships and communication between school districts and their county commissions can help ensure agreement on how to strategically invest funds in ways that will benefit students.

- 3. Transparency is important as potential PARCC assessment transition barriers are removed. The Tennessee Department of Education should work directly with districts to find solutions to potential barriers in implementation. State leaders have a role to play to support local efforts by facilitating partnerships between districts, schools, community organizations, and educational associations.
- 4. As technology use increases, it is important to ensure security measures are in place. Innovations in technology enable educators to use data to enhance teaching and learning. However, student and teacher personal information must always be protected.



SUPPORTING STUDENTS FROM KINDERGARTEN TO CAREER:

Creating Multiple Pathways to Postsecondary Success

Overview

It is critical that students receive an education that prepares them for the demands of the workforce, both today and in the future. Multiple state agencies - from the Tennessee Department of Education (TDOE) to the Department of Economic and Community Development - are working together to ensure students have access to rigorous academic and career pathways that are aligned with state and local economic needs. The goal is to develop an educated and skilled workforce across Tennessee.

Currently, too few Tennesseans graduate high school prepared for success in college or career. Less than 60 percent of high school graduates in the state go on to a postsecondary

education, and 67 percent of students require remedial math or English in college. Further, less than 30 percent of students graduate from community college within six years, and about 50 percent graduate from a four-year university. Tennessee ranks 42nd nationally in terms of working adults with at least a twoyear degree. Workforce projections show that by 2018, 54 percent of all jobs in Tennessee, approximately 1.8 million jobs, will require postsecondary training.xxx Without additional strategies in place, only 39 percent of Tennesseans will have a postsecondary credential by 2025. State leaders, including the governor, legislators, and TDOE officials, have recognized

the need to better prepare students during their K-12 education and create meaningful pathways that enable students to successfully enter college or the workforce. As much of the work is still in the beginning stages, it will be important to assess whether programs are meeting their intended goals.

Update on the Work

Tennessee's path to higher academic standards, first through the Tennessee Diploma Project and now through Tennessee's Common Core State Standards, has been propelled by the understanding that students need to be better prepared to meet the demands of life after high school. Whether graduates choose to pursue postsecondary education or enter the workforce, they must develop critical thinking and problem solving skills to succeed. Results from an international survey of adult skills in 2013 revealed that "what people know - and what they can do with what they know - has a major impact on their life chances."xxxi For instance, individuals who are able to make complex inferences and closely evaluate written texts have a median hourly wage that is 60 percent higher than individuals with low literacy skills.xxxii

Since 2010, there has been a progression of initiatives that aim to ensure all students in Tennessee are prepared for college or career, while increasing the percentage of Tennesseans who complete postsecondary education. In January 2010, the Tennessee General Assembly passed the Complete College Tennessee Act (CCTA) as a means to transform public higher education in the state and ensure that more Tennesseans are

College and Career Readiness

The phrase "college and career readiness" is prevalent throughout the current education dialogue. It is used when discussing standards and assessments, as well as curriculum requirements and postsecondary opportunities for students. The focus on college and career readiness has elevated the conversation about how well today's high schools are preparing students to meet the demands of postsecondary education or job opportunities. In fact, the driving force behind revising states' academic standards and assessments is the need to better align what students learn in high school with the skills and knowledge that will help them be successful in the educational or career path they choose. Students must develop critical thinking and problem solving skills, in addition to studying subject areas and content. Tennessee's Common Core State Standards, which are designed to prepare "students with the essential knowledge and skills to compete in an increasingly global environment," provide a way to achieve these goals and develop a better educated workforce.

> better trained and educated. The key policy levers established through this legislation include a new funding formula based on outcomes instead of enrollment, a new Performance Funding program that focused on quality assurance, and the creation of mission statements or profiles that distinguish institutions by degree level, programs, and student characteristics.xxxiii In November of 2010, the non-profit Tennessee College Access and Success Network (TCASN) was established to help increase the number of Tennesseans completing post-

secondary education opportunities by creating a college-going culture in communities across the state, removing barriers to higher education, and promoting college persistence. In 2013, TCASN awarded over \$400,000 in grant funding to 12 projects that will help 27,000 students access postsecondary education.xxxiv

The TDOE's Division of Career and Technical Education (CTE) has been leading several key initiatives to help ensure students are college and career ready. The division has been working with educators across the state to develop programs of study and course standards that reflect more focused pathways leading from secondary to postsecondary and career. The course redesign and accompanying professional development is better aligned to current industry demands and embeds Common Core State Standards for Literacy in Technical Subjects in each of the courses, as well as general education and/or national industry standards (where applicable). Additionally, the division oversees Tennessee's involvement in the Pathways to Prosperity Network, which is a group of six states working together to ensure more students graduate high school and earn postsecondary certificates and degrees aligned with current labor market needs. Pathways Tennessee provides a way to coordinate efforts of multiple state agencies and local/regional stakeholders with the shared goal of developing a prepared workforce to meet the demands of current and future Tennessee businesses. These initiatives include the promotion of early postsecondary opportunities, focused academic and career guidance, as well as programs that provide last-dollar scholarships and mentors to help students succeed in postsecondary education. The CTE Division also leads the department's efforts to develop, expand and promote early postsecondary opportunities for high school students through the Office of Postsecondary Coordination and Alignment. This office works closely with the Consortium for Cooperative Innovative Education, which was established by the General Assembly in 2012 promote collaboration between secondary and postsecondary governing bodies around early postsecondary initiatives. The work of this office includes dual-credit, dual enrollment, Advanced Placement, and International Baccalaureate courses, as well as the College Level Examination Program. Three dual-credit courses were approved by the consortium and are being



piloted during the 2013-2014 school year, with plans underway for another six dual-credit courses to be piloted in 2014-2015. A challenge moving forward will be measuring how participation in early postsecondary opportunities affects

Not only can high school students earn postsecondary credit through advanced courses, but there are also opportunities for students to take developmental courses in preparation for college. The Seamless Alignment and Integrated Learning Support (SAILS) program gives high school seniors who have struggled with math an opportunity to complete the college Learning Support Math program with the goal of beginning college-level math at a postsecondary institution, potentially saving both time and money. As of December 2013, the SAILS program saved participating students over \$2.8 million

The tnAchieves program focuses on increasing postsecondary access and success by providing last-dollar scholarships and mentor guidance. The program began in Knox County with the 2009 high school graduating class, and has since

expanded to serve 146 high schools across 38 school districts. In 2013. 2.947 students used this program to successfully begin their postsecondary careers. By 2014, the program reports that it will have funded close to \$8.9 million in



last-dollar scholarships. While all of these efforts are helping break down potential barriers to postsecondary education, they are still in their beginning stages and have not yet had a chance to demonstrate success when brought to scale statewide.

The focus on connecting student learning opportunities in K-12 with meaningful postsecondary and career options has also led to increased attention to science, technology, engineering, and math (STEM) subjects. Tennessee's economy is rich in STEM resources, including heavy industry, agriculture, automotive manufacturing, and healthcare. About a fifth of jobs in the state's large metropolitan areas require a high level

of knowledge in a STEM field.xxxvii The Tennessee STEM Innovation Network has been working to unite business and education partners to provide schools and districts with innovative STEM opportunities for their students and faculty. The network's six regional STEM hubs across the state have helped establish and enhance the partnerships between local education agencies, higher education institutions, and related business and industry. The partnerships created by the hubs are connecting students to field placement internships that will enrich their learning experiences, while also providing teacher externships that provide opportunities for teachers to enhance their instructional skills through real-world participation in industry. The regional hubs and platform schools work collaboratively to bring industry expertise into the classroom. The incorporation of industry professionals into instruction infuses real-world projects that seek to raise students' interest and awareness for STEM careers.

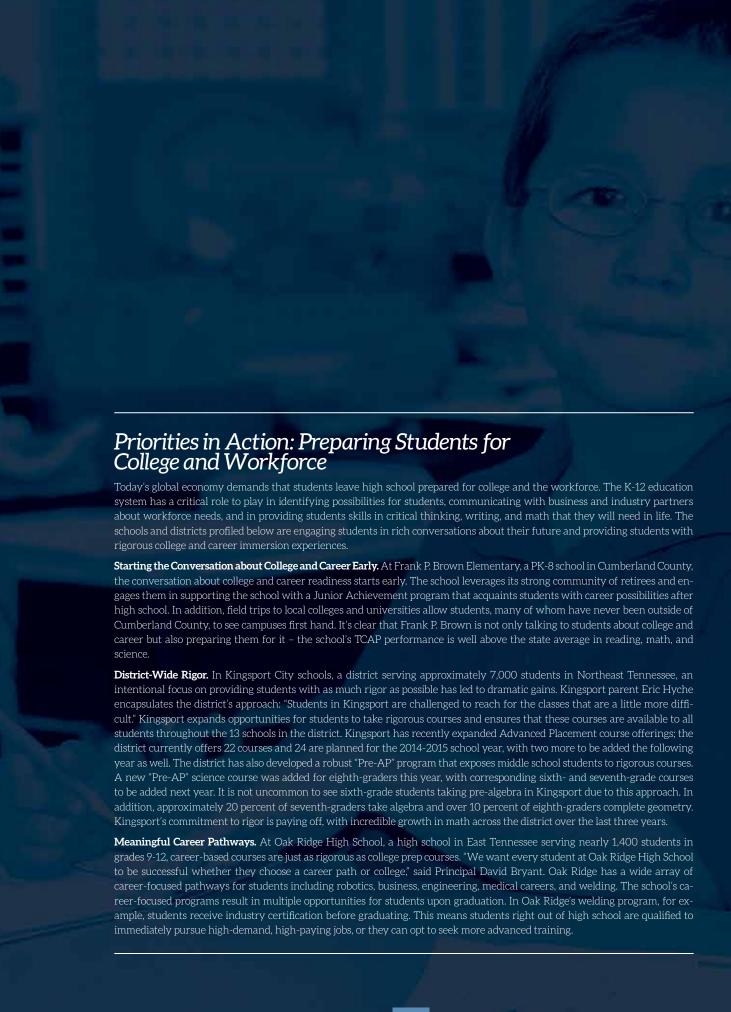
In September 2013, Governor Haslam announced the Drive to 55 initiative aimed at increasing the number of Tennesseans with postsecondary credentials to meet today's workforce demands. The goal of the Drive to 55 is to bring the percentage of Tennesseans with college degrees or certifications to 55 percent by the year 2025. The initiative is bringing a renewed sense of energy and commitment to leveraging many of the programs outlined above to ensure more Tennesseans complete postsecondary education. In his announcement, the Governor explained, "In today's world, we need to be thinking in terms of K-J, kindergarten to jobs. We need to do a better job of defining reality for our students to help them understand what is expected in the workforce and to map out different paths and programs so that they understand what success looks like for them." A key part of the initiative involves improved accountability and alignment between K-12 education agencies, postsecondary institutions, and businesses xxxviii

Whether graduates choose to pursue postsecondary education or enter the work force, they must develop critical thinking and problem solving skills to succeed.

Priorities for 2014

In today's economy, the majority of career pathways require education and training beyond high school. As Tennessee embarks on work to ensure that citizens have the skills they need to work in the fastest-growing fields in our state, the public K-12 education system has an important role to play.

- 1. Create a data-driven environment that equips policymakers, superintendents, principals, teachers, and parents with the information and tools they need to advance student learning and success. The Measure Tennessee data system which connects information from multiple sources, including K-12, higher education, and the workforce will enable schools and districts to know how their students perform after high school. It is also important to be clear that the data system still protects the privacy of individual student information. Using key data will help local systems determine what changes should be made to curricular and program offerings to ensure students are ready for multiple postsecondary pathways.
- 2. Increase and expand opportunities for high school students to participate in rigorous coursework, including Advanced Placement, International Baccalaureate, dual-credit, and dual-enrollment courses. Barriers (e.g. financial, geographic, or administrative) that prevent students from participating in such courses should be identified and removed.
- 3. Increase and expand opportunities for students to study STEM subjects and pursue career opportunities in STEM fields. The Tennessee Department of Economic and Community Development identified 10 industries where Tennessee has a competitive advantage, and 7 of them require a solid foundation in STEM subjects. The work to support STEM education in the state must continue to be a priority in the absence of Race to the Top Funds.

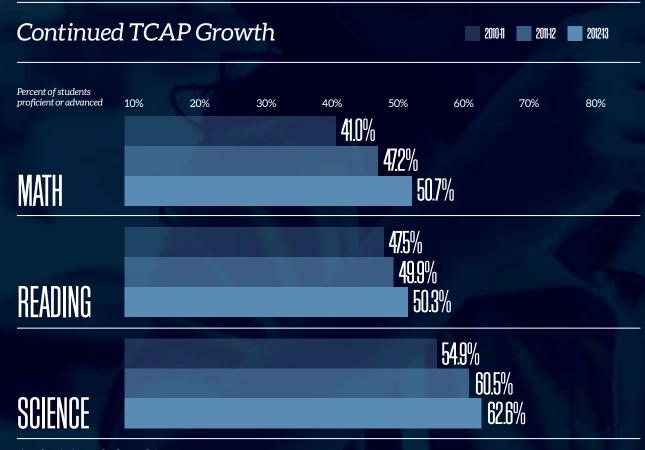


SCORE CARD

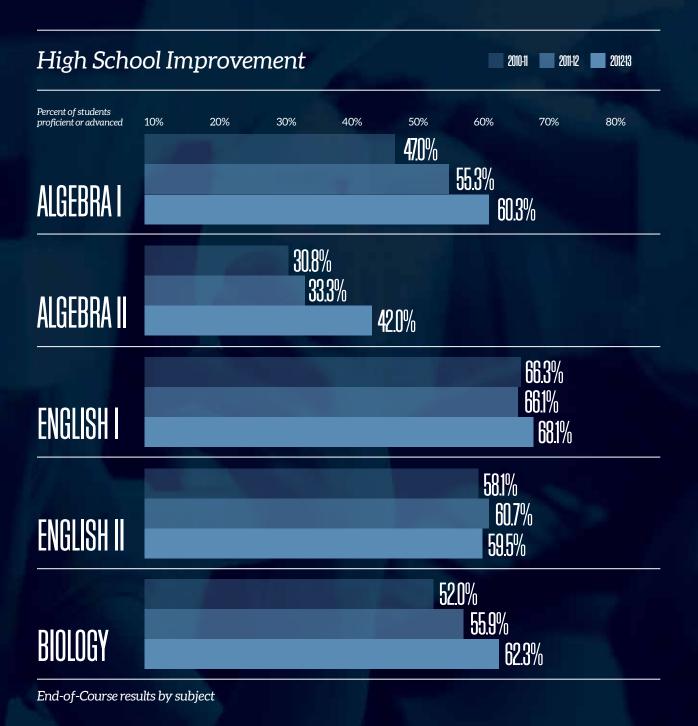
2012-2013 STATE DATA

The Tennessee Comprehensive Assessment Program (TCAP) currently encompasses subject-specific assessments for grades 3-8, as well as high school end-of-course exams. Since 2010, districts across the state have seen significant increases in the number of students who are proficient or advanced in math and science from third through twelfth grade – statewide, there are at least 91,000 more students who are proficient in math and at least 51,000 more in science.**

The graphs below illustrate the continued growth on state exams in math, language arts, and science.

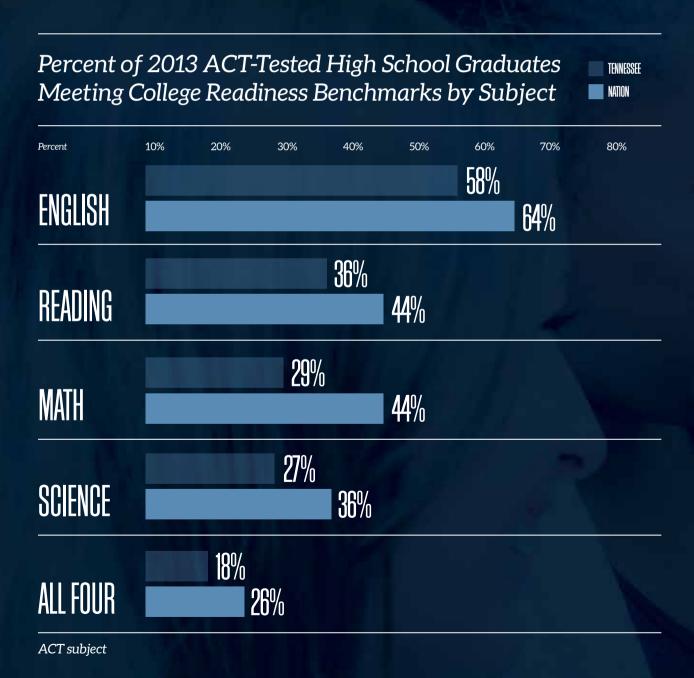


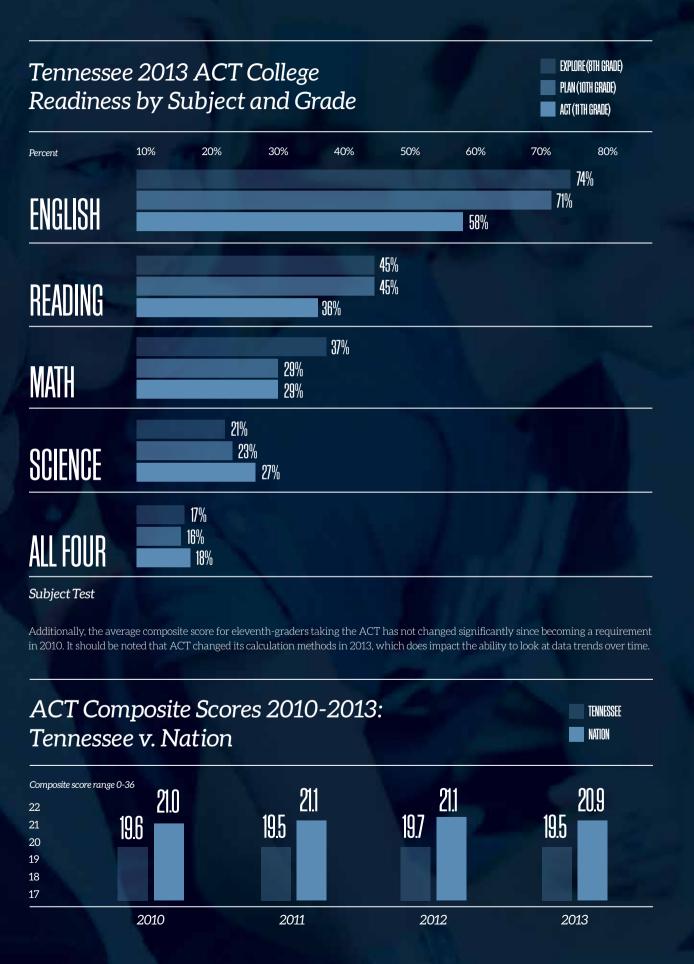




COLLEGE READINESS EXAMS

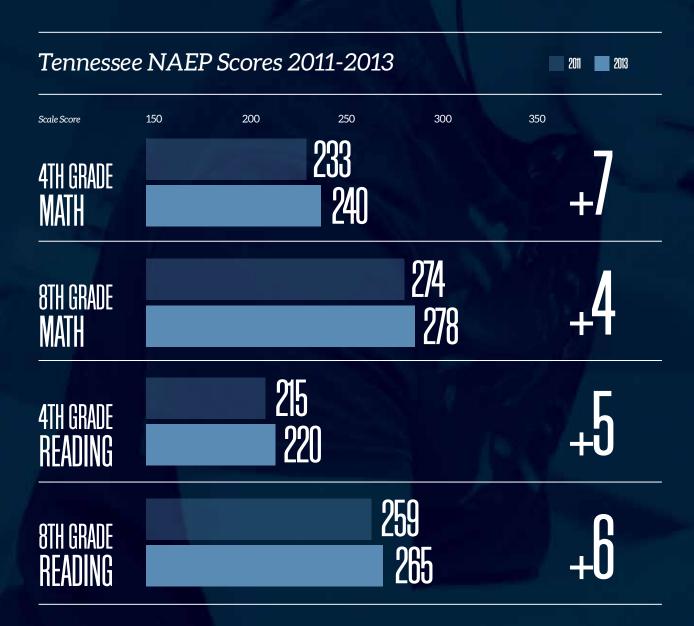
Tennessee requires specific assessments to measure whether or not students are on track to graduate ready for college and career. The assessments include: ACT Explore in eighth grade, ACT Plan in tenth grade, and the ACT in eleventh grade. Students meeting ACT Benchmark scores have approximately a 50 percent chance of earning a B or higher and approximately a 75 percent chance of earning a C or higher in their corresponding college course area. Since 2010, Tennessee has seen slight progress in terms of the percent of students meeting the College Readiness Benchmarks but continues to be below the majority of other states who use the ACT. In 2013, only 18 percent of eleventh-graders, 16 percent of tenth-graders, and 17 percent of eighth-graders met all four benchmarks on their respective ACT tests. Tennessee ranks 13th out of 17 states in which more than 75 percent of high school students take the ACT.





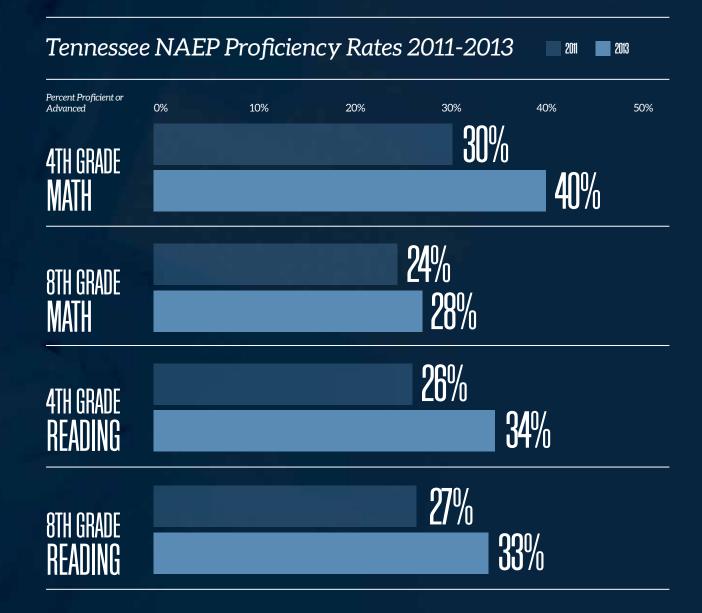
NATIONAL ASSESSMENTS

The National Assessment of Education Progress (NAEP) is currently the only consistent measure to compare student achievement in fourthand eighth-grade across all states. In 2013, Tennessee students surpassed their peers across the country in overall gains on national math and reading tests, making Tennessee the fastest-improving state in the nation, with only the District of Columbia having slightly greater overall gains. The charts below illustrate the gains that Tennessee made between 2011 and 2013 in terms of both scores and the percent of students proficient or advanced by subject and grade.



TENNESSEE'S NATIONAL RANKING ON THE NAEP MATH AND READING EXAMS IMPROVED BETWEEN 2011 AND 2013.

	MATH ——		READING —			
	4th Grade	8th Grade	4th Grade	8th Grade		
2011 RANKING	46th	45th	41st	41st		
2013 RANKING	37th	43rd	31st	34th		



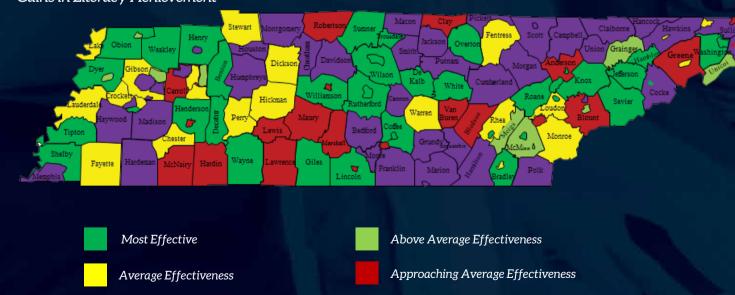
2012-2013 DISTRICT DATA

The state data presented in the previous section clearly show that Tennessee students have been improving on both state and national assessments. However, it is also important to look at district-specific data to better understand how gains in student achievement may differ across the state. The maps below illustrate the difference between student achievement growth in math and reading/language arts. Eighty-five percent of districts had a TVAAS Numeracy score of four or five, meaning that their students made more progress in math than what had been predicted. On the other hand, 48 percent of districts had a TVAAS Literacy score of one or two, meaning that their students were making less progress in reading/language arts.

Gains in Math Achievement



Gains in Literacy Achievement



Least Effective

SCORE CARD INDICATORS

The district data for each of the following indicators were obtained from the Tennessee Department of Education and apply to the 2012-2013 school year.

District Characteristics

Number of Schools – The number of schools operating in each district for the 2012-13 school year

Enrollment - The total count of students enrolled in each individual school district as of October 1, 2012

Percent White – The percent of enrolled students identified as White

Percent Black - The percent of enrolled students identified as Black or African American

Percent ED – The percent of enrolled students identified as economically disadvantaged or eligible for free and reduced price lunch

Per Pupil Spending - The total current operating expenditures on a per pupil basis in each district from state, local, and federal sources

Percent Local Funding - The percent of district per pupil expenditures that comes from local revenue sources

Tennessee Assessments

Percent Prof/Adv 3-8 Math – The percent of students in grades 3-8 who scored proficient or advanced on the state's 2013 TCAP math assessments

Percent Prof/Adv 3-8 Reading - The percent of students in grades 3-8 who scored proficient or advanced on the state's 2013 TCAP reading/language arts assessments

TVAAS – The scores based on growth for one year from the previous academic year. The Standard for Academic Growth is met when the student group makes one year's growth and maintains their relative achievement from one year to the next. Scores are provided on the following 1-5 scale:

Level 5: Most effective – schools whose students are making substantially more progress than the Standards for Academic Growth

Level 4: Above average effectiveness – schools whose students are making more progress than the Standards for Academic Growth

Level 3: Average effectiveness – schools whose students are making the same amount of progress as the Standards for Academic Growth

Level 2: Approaching average effectiveness – schools whose students are making less progress than the Standards for Academic Growth

Level 1: Least effective – schools whose students are making substantially less progress than the Standards for Academic Growth

Composite – The TVAAS Composite score shows growth at the district level based on student performance on statewide assessments across all available subjects and grades, and includes grades K-2 for districts that opted to test those students.

Numeracy - The TVAAS Numeracy score is based on all available data in math

Literacy - The TVAAS Literacy score is based on all available data in reading/language arts

High School Success

ACT Composite – The average ACT composite score for the 2013 graduating class for all test-takers

Graduation Rate – The percent of students in each district who graduated from high school within four years and a summer out of those students that entered the ninth grade four years prior

ACT College Readiness - The percent of students in each district who met ACT's College Readiness Benchmarks across all four subject areas

The following pages present in-depth student achievement data for each district in Tennessee.

Descriptions of each metric measured in the report are provided, and more information about individual measures may be found in the glossary.

District 🔻	District Characteristics									
	Number of Schools	Enrollment	% White	% Black	%ED	Per Pupil Spending	% Local Funding			
Achievement School District	6	1,648	2%	96%	93%	n/a	n/a			
Alamo City	1	670	70%	15%	65%	\$8,405	11%			
Alcoa City	3	1,867	68%	21%	52%	\$10,546	53%			
Alvin C. York Institute	1	661	98%	0%	65%	n/a	n/a			
Anderson County	17	6,855	96%	3%	58%	\$10,085	37%			
Athens City	5	1,708	73%	17%	70%	\$10,017	36%			
Bedford County	14	8,249	69%	11%	66%	\$7,882	21%			
Bells City	1	445	58%	18%	63%	\$8,422	13%			
Benton County	8	2,293	93%	4%	66%	\$9,305	31%			
Bledsoe County	5	2,027	92%	1%	84%	\$9,563	16%			
Blount County	20	11,403	93%	3%	51%	\$8,959	40%			
Bradford SSD	2	534	93%	6%	58%	\$10,362	24%			
Bradley County	18	10,441	92%	4%	55%	\$8,054	32%			
Bristol City	8	4,085	90%	6%	52%	\$10,042	53%			
Campbell County	13	5,889	98%	0%	74%	\$8,197	21%			
Cannon County	7	2,128	95%	2%	64%	\$8,437	20%			
Carter County	16	5,714	96%	1%	72%	\$8,820	25%			
Cheatham County	13	6,675	94%	2%	49%	\$7,946	27%			
Chester County	6	2,825	83%	14%	60%	\$7,776	16%			
Claiborne County	13	4,719	97%	2%	75%	\$9,136	26%			
Clay County	5	1,089	96%	2%	69%	\$9,457	21%			
Cleveland City	8	5,423	69%	14%	62%	\$9,148	37%			
Clinton City	3	926	91%	5%	61%	\$9,412	41%			
Cocke County	12	4,809	94%	3%	77%	\$8,898	24%			
Coffee County	9	4,573	92%	3%	58%	\$9,161	37%			
Crockett County	5	1,946	72%	14%	67%	\$8,011	15%			
Cumberland County	12	7,484	94%	1%	66%	\$7,990	32%			
Davidson County	154	81,134	32%	45%	72%	\$11,421	59%			
Dayton City	1	827	80%	7%	66%	\$7,837	21%			
Decatur County	4	1,685	91%	4%	56%	\$8,716	25%			
DeKalb County	6	3,027	88%	2%	64%	\$8,105	20%			
Dickson County	15	8,451	87%	8%	56%	\$8,379	34%			
Dyer County	8	3,911	89%	8%	63%	\$8,704	34%			
Dyersburg City	4	2,908	52%	43%	73%	\$9,837	35%			
Elizabethton City	5	2,503	93%	5%	51%	\$9,217	35%			
Etowah City	1	371	91%	6%	74%	\$9,937	24%			
Fayette County	10	3,812	37%	57%	77%	\$8,913	31%			
Fayetteville City	3	1,372	63%	31%	61%	\$9,101	30%			

Tennessee Asse	ssments		High School Success				
% Prof/Adv	% Prof/Adv	TVAAS	TVAAS	TVAAS	ACT	Graduation	ACT College
3-8 Math	3-8 Reading	Composite	Numeracy	Literacy	Composite	Rate	Readiness
20%	14%	5	5	1	n/a	n/a	n/a
73%	66%	5	5	1	n/a	n/a	n/a
52%	57%	5	5	1	21.6	99%	28%
n/a	n/a	5	5	4	n/a	89%	n/a
50%	46%	5	5	2	18.9	91%	13%
65%	58%	5	5	5	n/a	n/a	n/a
48%	45%	5	5	1	18	89%	10%
63%	55%	5	5	5	n/a	n/a	n/a
48%	48%	5	5	5	18.4	88%	10%
46%	40%	5	5	2	18.4	90%	8%
53%	52%	5	5	2	19.8	91%	18%
74%	63%	5	5	4	19.5	93%	8%
50%	54%	5	5	5	18.2	90%	9%
58%	55%	5	5	2	20.1	90%	18%
42%	41%	3	5	1	17.3	81%	6%
43%	45%	1	2	1	17.3	83%	3%
38%	43%	1	1	1	17.6	91%	6%
47%	48%	1	1	1	18.7	86%	13%
62%	51%	5	5	3	18.8	94%	9%
49%	47%	3	5	1	17.4	89%	7%
38%	40%	3	3	2	18.4	96%	11%
52%	51%	5	5	3	19.5	86%	17%
72%	67%	5	5	5	n/a	n/a	n/a
57%	46%	1	3	1	17.6	90%	9%
49%	51%	5	5	5	18.6	92%	13%
47%	46%	5	5	3	18.3	90%	7%
50%	54%	1	4	1	19.1	93%	13%
43%	40%	3	5	1	18.2	77%	11%
50%	59%	3	2	5	n/a	n/a	n/a
55%	46%	5	5	5	18	95%	6%
43%	50%	5	5	5	18.4	95%	7%
56%	59%	5	5	3	19.3	87%	14%
59%	56%	5	5	5	19.2	91%	13%
50%	44%	5	5	4	20.4	86%	21%
56%	55%	3	4	2	20.5	94%	19%
35%	46%	5	5	4	n/a	n/a	n/a
32%	34%	3	3	3	16	80%	3%
48%	51%	2	2	2	n/a	n/a	n/a

	District Characteristics									
District 🔻	Number of Schools	Enrollment	% White	% Black	%ED	Per Pupil Spending	% Local Funding			
Fentress County	6	2,389	98%	0%	76%	\$8,972	20%			
Franklin County	11	5,868	89%	7%	58%	\$8,891	32%			
Franklin SSD	8	3,867	58%	14%	39%	\$12,930	67%			
Gibson Co SSD	9	3,971	91%	8%	44%	\$7,034	27%			
Giles County	8	4,058	80%	17%	62%	\$8,769	33%			
Grainger County	9	3,649	94%	1%	71%	\$7,868	16%			
Greene County	16	7,341	95%	1%	68%	\$8,070	26%			
Greeneville City	7	2,845	81%	10%	48%	\$10,469	45%			
Grundy County	8	2,310	99%	0%	79%	\$9,485	15%			
Hamblen County	18	10,266	73%	6%	64%	\$8,103	35%			
Hamilton County	79	43,691	58%	31%	59%	\$9,444	53%			
Hancock County	2	977	99%	0%	80%	\$9,549	11%			
Hardeman County	9	4,056	44%	53%	83%	\$9,321	24%			
Hardin County	7	3,717	91%	5%	67%	\$9,100	37%			
Hawkins County	18	7,439	96%	2%	66%	\$9,016	28%			
Haywood County	5	3,386	30%	63%	77%	\$9,243	22%			
Henderson County	9	3,915	90%	8%	62%	\$8,319	26%			
Henry County	6	3,179	90%	6%	64%	\$9,186	35%			
Hickman County	8	3,687	94%	3%	63%	\$8,785	20%			
Hollow Rock Bruceton	2	669	88%	10%	72%	\$8,542	23%			
Houston County	5	1,415	92%	5%	61%	\$8,828	17%			
Humboldt City	4	1,205	21%	73%	87%	\$11,216	24%			
Humphreys County	7	3,119	94%	4%	61%	\$8,739	26%			
Huntingdon SSD	3	1,249	79%	19%	55%	\$7,856	25%			
Jackson County	4	1,583	98%	1%	71%	\$8,867	20%			
Jefferson County	12	7,551	90%	3%	62%	\$8,443	28%			
Johnson City	11	7,738	76%	14%	49%	\$9,384	53%			
Johnson County	7	2,329	96%	1%	72%	\$10,379	24%			
Kingsport City	13	7,045	84%	10%	51%	\$10,401	56%			
Knox County	88	58,940	75%	16%	47%	\$9,077	54%			
Lake County	3	960	67%	31%	75%	\$10,268	18%			
Lauderdale County	7	4,724	54%	43%	80%	\$8,864	16%			
Lawrence County	13	6,851	95%	3%	59%	\$7,952	23%			
Lebanon SSD	6	3,691	70%	17%	60%	\$8,166	45%			
Lenoir City	3	2,341	75%	2%	62%	\$9,353	47%			
Lewis County	4	1,958	93%	3%	63%	\$7,729	18%			
Lexington City	2	1,018	69%	24%	55%	\$9,772	29%			

Tennessee Assessments					High School Success			
% Prof/Adv	% Prof/Adv	TVAAS	TVAAS	TVAAS	ACT	Graduation	ACT College	
3-8 Math	3-8 Reading	Composite	Numeracy	Literacy	Composite	Rate	Readiness	
43%	45%	3	5	3	18.8	94%	7%	
43%	48%	1	2	1	18.8	94%	10%	
72%	71%	5	5	2	n/a	n/a	n/a	
65%	62%	5	5	3	18.7	96%	10%	
39%	48%	5	5	5	18	86%	8%	
44%	40%	4	5	4	18.4	89%	7%	
47%	45%	5	5	2	18.9	92%	11%	
66%	60%	5	5	3	20.4	97%	21%	
38%	37%	2	5	1	17.4	81%	7%	
54%	53%	5	5	5	20	89%	21%	
54%	47%	5	5	1	18.7	85%	13%	
33%	29%	1	1	1	17.8	88%	11%	
43%	41%	5	5	1	16.9	84%	4%	
42%	47%	5	5	2	18.5	87%	12%	
47%	46%	2	5	1	18	90%	8%	
36%	33%	1	5	1	17.3	80%	8%	
68%	57%	5	5	5	18.7	97%	10%	
65%	59%	5	5	5	19.1	91%	13%	
52%	48%	5	4	3	18.1	92%	9%	
45%	41%	5	5	4	17.8	96%	8%	
50%	49%	3	5	1	18.8	98%	11%	
44%	33%	5	5	1	15.4	75%	5%	
51%	51%	5	5	1	19.1	87%	13%	
68%	58%	5	5	3	19.6	100%	12%	
40%	41%	2	4	1	18.8	83%	11%	
46%	45%	5	5	5	19.8	91%	17%	
72%	69%	5	5	5	22.1	92%	35%	
51%	50%	1	3	1	18	98%	10%	
68%	62%	5	5	3	22.2	90%	34%	
54%	57%	5	5	5	20.2	88%	21%	
31%	31%	5	5	3	15.9	77%	4%	
41%	40%	5	5	3	17	93%	6%	
63%	60%	5	5	2	18.5	94%	9%	
46%	52%	5	5	5	n/a	n/a	n/a	
42%	42%	3	5	2	19.9	88%	19%	
49%	51%	3	2	2	18.2	90%	10%	
63%	57%	5	5	2	n/a	n/a	n/a	

	District Characteristics									
District 🔻	Number of Schools	Enrollment	% White	% Black	%ED	Per Pupil Spending	% Local Funding			
Lincoln County	8	4,141	91%	4%	54%	\$8,180	26%			
Loudon County	9	5,063	86%	3%	57%	\$8,553	24%			
Macon County	8	3,844	92%	1%	61%	\$8,097	18%			
Madison County	27	13,375	32%	60%	77%	\$9,718	46%			
Manchester City	3	1,365	77%	6%	65%	\$11,432	42%			
Marion County	10	4,320	93%	5%	66%	\$8,346	29%			
Marshall County	9	5,360	84%	9%	57%	\$8,469	30%			
Mary ville City	7	5,029	89%	5%	36%	\$9,823	54%			
Maury County	20	11,970	71%	20%	58%	\$8,739	37%			
McKenzie SSD	3	1,410	82%	14%	60%	\$7,445	23%			
McMinn County	9	6,093	90%	5%	61%	\$8,053	28%			
McNairy County	8	4,422	90%	8%	65%	\$8,400	21%			
Meigs County	4	1,805	97%	2%	70%	\$8,757	18%			
Memphis City	213	106,991	7%	82%	84%	\$11,570	40%			
Milan SSD	3	2,122	71%	24%	60%	\$8,432	28%			
Monroe County	13	5,586	93%	3%	68%	\$8,607	26%			
Montgomery County	37	30,621	57%	28%	47%	\$8,829	34%			
Moore County	2	1,014	95%	4%	53%	\$9,398	35%			
Morgan County	8	3,317	98%	1%	65%	\$8,607	15%			
Murfreesboro City	11	7,221	55%	28%	53%	\$8,827	41%			
Newport City	1	765	88%	7%	60%	\$8,860	29%			
Oak Ridge City	7	4,469	71%	16%	47%	\$12,075	54%			
Obion County	7	3,744	90%	5%	59%	\$8,722	30%			
Oneida SSD	3	1,304	99%	0%	67%	\$8,247	22%			
Overton County	9	3,432	97%	1%	64%	\$8,181	17%			
Paris SSD	3	1,779	74%	24%	62%	\$8,489	37%			
Perry County	4	1,155	93%	4%	70%	\$9,612	21%			
Pickett County	2	756	97%	0%	60%	\$8,687	19%			
Polk County	6	2,653	97%	1%	71%	\$8,731	23%			
Putnam County	20	11,084	84%	4%	55%	\$8,721	35%			
Rhea County	6	4,465	90%	2%	74%	\$8,020	25%			
Richard City	1	319	94%	5%	60%	\$7,864	27%			
Roane County	17	7,139	92%	5%	58%	\$9,352	41%			
Robertson County	20	11,515	78%	11%	50%	\$8,408	30%			
Rogersville City	1	680	92%	4%	45%	\$9,093	35%			
Rutherford County	46	40,406	68%	17%	42%	\$8,011	39%			
Scott County	7	3,117	99%	0%	83%	\$8,408	16%			

Tennessee Asse	essments		High School Success				
% Prof/Adv	% Prof/Adv	TVAAS	TVAAS	TVAAS	ACT Graduation ACT College		
3-8 Math	3-8 Reading	Composite	Numeracy	Literacy	Composite	Rate	Readiness
53%	59%	5	5	5	18.5	91%	10%
53%	58%	5	5	5	18.1	89%	10%
44%	46%	1	5	1	17.8	90%	7%
39%	38%	4	5	1	17.6	92%	6%
44%	55%	5	5	5	n/a	n/a	n/a
46%	48%	4	5	1	18.8	81%	14%
52%	51%	5	5	2	18.5	88%	11%
67%	72%	5	5	4	22.9	95%	34%
39%	49%	5	5	2	18.6	83%	12%
60%	58%	2	3	1	18.3	96%	11%
53%	50%	5	5	4	18.7	92%	12%
52%	50%	3	5	2	18.4	94%	9%
60%	52%	5	5	4	18.7	96%	11%
33%	29%	5	5	1	16.1	68%	5%
55%	43%	3	5	1	19.3	96%	17%
41%	42%	2	5	3	18.2	93%	8%
52%	55%	5	5	1	19.5	94%	18%
56%	48%	1	3	1	18.3	88%	11%
35%	40%	1	1	1	17.3	97%	3%
64%	61%	5	5	5	n/a	n/a	n/a
63%	63%	5	5	5	n/a	n/a	n/a
62%	62%	5	5	5	22.6	85%	39%
53%	52%	5	5	5	19.2	93%	16%
41%	54%	2	2	1	18.2	95%	8%
55%	52%	5	5	5	17.1	91%	5%
60%	54%	5	5	1	n/a	n/a	n/a
60%	50%	5	5	3	17.6	93%	10%
31%	49%	1	1	1	18.4	84%	18%
45%	43%	3	5	1	18.6	90%	10%
51%	52%	1	5	1	19.9	92%	19%
53%	47%	5	5	3	18.7	81%	13%
44%	51%	5	5	3	18	100%	3%
48%	50%	5	5	5	19.2	93%	15%
55%	51%	5	5	2	18.3	93%	10%
60%	68%	5	5	3	n/a	n/a	n/a
64%	62%	5	5	5	19.7	92%	18%
41%	47%	1	5	1	16.8	87%	5%

	District Characteristics									
District	Number of Schools	Enrollment	% White	% Black	%ED	Per Pupil Spending	% Local Funding			
Sequatchie County	3	2,324	93%	1%	67%	\$7,899	26%			
Sevier County	27	14,670	89%	2%	64%	\$9,510	61%			
Shelby County	52	46,601	51%	38%	37%	\$9,123	42%			
Smith County	10	3,225	92%	4%	57%	\$8,297	22%			
South Carroll SSD	1	393	89%	7%	60%	\$8,612	24%			
Stewart County	5	2,216	95%	3%	59%	\$9,124	22%			
Sullivan County	22	10,978	97%	1%	55%	\$9,377	44%			
Sumner County	46	28,443	82%	10%	40%	\$8,120	35%			
Sweetwater City	4	1,589	84%	6%	74%	\$8,219	24%			
Tenn Sch for Deaf	3	171	63%	29%	79%	n/a	n/a			
Tenn School for Blind	1	150	71%	20%	55%	n/a	n/a			
Tipton County	14	11,819	72%	25%	58%	\$8,207	21%			
Trenton SSD	3	1,420	66%	29%	61%	\$8,759	28%			
Trousdale County	3	1,276	83%	14%	56%	\$8,367	18%			
Tullahoma City	7	3,471	81%	12%	53%	\$10,022	48%			
Unicoi County	7	2,629	90%	1%	64%	\$8,379	23%			
Union City	3	1,500	48%	42%	69%	\$9,395	35%			
Union County	10	6,046	89%	7%	73%	\$7,314	10%			
Van Buren County	2	789	99%	0%	64%	\$9,593	20%			
Warren County	11	6,630	80%	5%	66%	\$8,553	24%			
Washington County	16	9,057	94%	2%	48%	\$8,258	43%			
Wayne County	8	2,504	96%	2%	65%	\$8,870	15%			
Weakley County	11	4,540	88%	9%	62%	\$8,202	23%			
West Carroll SSD	3	1,026	87%	11%	70%	\$8,359	24%			
West Tn Sch for Deaf	1	52	42%	46%	77%	n/a	n/a			
White County	9	4,103	94%	3%	66%	\$7,905	18%			
Williamson County	41	33,357	86%	5%	12%	\$8,479	54%			
Wilson County	21	16,339	86%	8%	30%	\$7,770	41%			
Tennessee	1797	993,256	66%	24%	59%	\$9,293	40%			

Tennessee Asse	essments		High School Success				
% Prof/Adv 3-8 Math	% Prof/Adv 3-8 Reading	TVAAS Composite	TVAAS Numeracy	TVAAS Literacy	ACT Composite	Graduation Rate	ACT College Readiness
44%	43%	1	3	1	19	84%	11%
43%	47%	5	5	5	19.6	84%	16%
63%	62%	5	5	5	n/a	88%	n/a
57%	55%	3	5	1	18.9	93%	14%
48%	49%	3	4	3	19	87%	14%
64%	58%	5	5	3	19.5	99%	14%
54%	54%	1	5	1	20.1	91%	18%
56%	59%	5	5	5	20.1	89%	17%
54%	50%	1	3	2	n/a	n/a	n/a
0%	0%	n/a	n/a	n/a	n/a	n/a	n/a
0%	2%	n/a	n/a	n/a	n/a	n/a	n/a
54%	52%	5	5	5	20.1	98%	16%
45%	45%	1	4	1	18.2	96%	8%
67%	56%	5	5	5	18.8	99%	16%
50%	48%	2	4	2	20.6	90%	24%
46%	53%	3	2	4	19.3	95%	11%
48%	46%	5	5	4	20.7	91%	31%
22%	36%	1	1	1	17.4	74%	7%
26%	39%	3	4	2	18.2	91%	6%
42%	47%	5	5	3	18	88%	9%
58%	59%	5	5	5	19.6	90%	17%
50%	49%	5	5	5	17.8	94%	11%
60%	60%	5	5	5	19.5	93%	12%
48%	53%	5	5	2	18.2	92%	6%
8%	0%	n/a	n/a	n/a	n/a	n/a	n/a
56%	55%	5	5	5	18.6	91%	8%
77%	84%	5	5	5	23.4	94%	40%
61%	64%	5	5	5	19.9	95%	18%
51%	50%	n/a	n/a	n/a	19.1	86%	15%

GLOSSARY

ACT - The ACT is a standardized assessment for high school students frequently required for admission into college. The test has sections in English, mathematics, reading, science reasoning, and an optional written essay. Scored on a scale from one to 36, the test is intended to be an indicator of college readiness. The subjects align with common college introductory courses. All 11th graders in Tennessee are required to take this exam.

ACT College Readiness Benchmarks – The ACT benchmarks on subject-area tests represent the minimum score required for students to have approximately a 50 percent chance of earning a B or higher or about a 75 percent chance of earning a C or higher in the corresponding college level course. The ACT tests in English, math, reading, and science correspond to college credit courses in English composition, Algebra, social sciences, and biology.

Advanced Placement (AP) – Advanced Placement courses are courses offered by the College Board that provide students with an opportunity to take college-level courses and earn credit towards college while in high school. There are more than 30 different AP courses across multiple subject areas.

Alternative Salary Schedule – Alternative salary schedules tie a teacher's compensation and incentives to professional learning, student achievement, and other measures. They contrast traditional salary schedules, which uniformly increase the pay of teachers based on number of years teaching and level of degree completion.

Career and Technical Education (CTE)

- Also known as vocational education, career and technical education refers to courses and programs designed to prepare students to

enter the workforce. Usually in a secondary or postsecondary setting, CTE courses focus on academic and vocational skills needed in the workplace and typically include competency-based learning. CTE seeks to prepare students for jobs in fields such as agriculture, engineering, and health care.

Common Core State Standards – Tennessee's Common Core State Standards are a set of expectations for math and English language arts that were adopted in 2010. The standards are part of a state-led effort to ensure all students have the skills and knowledge they need to succeed.

Dual Credit – Dual credit courses are high school courses taught by high school faculty that are aligned with the curriculum of a postsecondary course. Students taking a dual credit course can receive postsecondary credit if they have satisfactory performance on an end-of-course assessment designed by the postsecondary institution.

Dual Enrollment – Dual enrollment is a postsecondary course taught at either the postsecondary institution or high school that allows students to simultaneously earn postsecondary and secondary course credit upon successful completion of the course.

 $\label{lem:end-of-Course Exams - Tennessee high schools administer End-of-Course exams in English I, II, and III, Algebra I and II, geometry, U.S. history, Biology I, chemistry, and physics. The exams count for 25 percent of a student's final grade.$

International Baccalaureate (IB) – The International Baccalaureate is a non-profit foundation that offers four educational programs on a continuum for students aged three to 19: the Primary Years Program, the Middle Year Program, the Diploma Program, and the Career-related Certificate. IB students are encouraged to develop an understanding of their own cultural and national identity.

National Assessment of Educational Progress (NAEP) – Also known as the Nation's Report Card, NAEP is administered by the National Center for Education Statistics in the subject

areas of mathematics, reading, science, writing, the arts, civics, economics, geography, and U.S. history. Exams are administered every two years to representative samples of students in grades 4, 8, and 12, and provide common metrics to indicate levels of student proficiency across states and selected urban districts.

Partnership for Assessment of Readiness for College and Careers (PARCC) – The Partnership for Assessment of Readiness for College and Careers is a consortium of states that are working together to develop common,



Throughout 2013, the Tennessee Department of Education, local school districts, and research-based advocacy organizations have continued to focus on the importance of fostering effective teaching.

computer-based assessments that are aligned with the Common Core State Standards. Beginning in 2014-15, PARCC assessments will replace the TCAP math and reading exams.

Postsecondary Education – Postsecondary education refers to colleges, universities, and technical centers that grant certificates, credentials, and degrees beyond a high school diploma.

STEM (Science, Technology, Engineering, and Mathematics) – STEM is a common acronym for the fields of study of science, technology, engineering, and mathematics. Beyond the subject areas, STEM education reflects an innovative approach to teaching and learning that incorporates problem solving, critical thinking, and real-world application of skills. Additionally, STEM education is about incorporating technology in the classroom to enhance learning.

State Salary Schedule—Tennessee's State Salary Schedule for teachers is a minimum salary amount determined by years of experience teaching and professional degrees earned.

Tennessee Comprehensive Assessment Program (TCAP) - The Tennessee Comprehensive Assessment Program (TCAP) is a collection of criterion-referenced achievement tests designed to evaluate the levels of students' proficiency in reading/language arts, math, science and social studies. Among the assessments are the Achievement Test (grades 3-8), the Writing assessment (grades 5, 8, and 11), the End-of-Course tests (grades 9-12), and college readiness exams (grades 8, 10, and 11). Districts may also choose to administer TCAP as-

sessments in selected subjects to students in grades K-2. There are four proficiency levels on the TCAP: below basic, basic, proficient, and advanced. Beginning in 2014-15, PARCC assessments will replace the TCAP math and reading exams.

Tennessee Value-Added Assessment System (TVAAS) – TVAAS is a measure of the effect a district, school, or teacher has on the academic progress or growth rates of individual students and groups of students from year to year. TVAAS scores are based on multiple measures, including TCAP 3-8 Achievement tests and high school End of Course exams.

Tenure - Tenure is a status where employees are hired on a permanent basis without periodic contract renewals. Tennessee law was changed in 2011 to enable districts to grant tenure to teachers after a five-year probationary period if teachers have demonstrated a certain level of effectiveness, based, in part, on student achievement.

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SOURCES

- ¹ Tennessee Department of Education (2013) 2013 TCAP Results. Retrieved from http://tn.gov/education/tcap/
- ^{II} ACT (2013). The Condition of College and Career Readiness 2013. Retrieved from http://www.act.org/research/policymakers/cccr13/index.html
- iii Peterson, P.E., Woessmann, L., Hanushek, E., & Lastra-Anadon, C.X. (2011, August). Globally Challenged: Are U.S. Students Ready to Compete? The latest on each state's international standing in math and reading. Harvard University Program on Education Policy and Governance: Report No.: 11-03
- iv Tennessee Department of Education (2013)
- ^v ACT (2013). The Condition of College and Career Readiness 2013. Retrieved from http://www.act.org/research/policymakers/cccr13/index.html
- vi Peterson, P.E., Woessmann, L., Hanushek, E., & Lastra-Anadon, C.X. (2011, August). Globally Challenged: Are U.S. Students Ready to Compete? The latest on each state's international standing in math and reading. Harvard University Program on Education Policy and Governance: Report No.: 11-03
- vii Tennessee Department of Education (2013, March 28). Tennessee Selects More than 700 Teachers to Help Lead Common Core Transition. Retrieved from https://news.tn.gov/sites/default/files/Tennessee%20Selects%20More%20Than%20700%20 Teachers%20to%20Help%20Lead%20Common%20Core%20Transition_0.pdf
- $^{\text{viii}}$ Tennessee Department of Education (2013). TNCore update #33. Retrieved from: http://archive.constantcontact.com/fs149/1103464106521/archive/1114472372130.html
- $^{\mathrm{ix}}$ Tennessee Department of Education (2013). Survey results from Common Core Leadership course 101.
- $\label{eq:condition} $x TNCore (2013, October). The Transition to PARCC: Instructional Implications from 2012-13 CRA and Writing Assessment Data. Retrieved from http://www.tncore.org/sites/www/Uploads/Assessment/WACRA%20Instructional%20Implications%20 Webinar%20DRAFT.pdf$
- xi Tennessee Department of Education (2013). 2013 TCAP Writing Assessment. Retrieved from http://www.tncore.org/english_language_arts/assessment/testing_information.aspx
- xiii Rosenthal, R. & Jacobson, L. (1968). Pygmalion in the Classroom: Teacher Expectation and Pupils' Intellectual Development. New York: Holt, Rinehart and Winston, Inc.
- Weinstein, R.S. (2002). Reaching Higher: The Power of Expectations in Schooling. Cambridge, MA: Harvard University Press.
- xiii Grissom, J.A. & Loeb, S. (2011). Triangulating Principal Effectiveness: How Perspectives of Parents, Teachers, and Assistant Principals Identify the Central Importance of Managerial Skills. *American Educational Research Journal*.
- xiv Grissom, J.A. & Loeb, S. (2011). Triangulating Principal Effectiveness: How Perspectives of Parents, Teachers, and Assistant Principals Identify the Central Importance of Managerial Skills. *American Educational Research Journal*. Retrieved from http://cepa.stanford.edu/sites/default/files/Triangulating.pdf
- ** Tennessee State Board of Education (2013, November). Learning Centered Leadership Policy. Retrieved from http://www.tennessee.gov/sbe/2008Novemberpdfs/IV%20A%20TN%20Learning%20Center%20Leadership%20Master.pdf
- xvi Tennessee State Board of Education (2012, July). Tennessee Learning Centered Leadership Policy
- xvii Tennessee Newsroom (2013, October 29). Haslam Announces School Leadership Academy Program. Retrieved from https://news.tn.gov/node/11596
- $\begin{array}{l} \text{xviii} \ \text{Public Education Foundation (2013, October)}. \ \text{Retrieved from http://www.pefchattanooga.org/our-impact/teaching-and-leading/promoting-leadership/75-jobs/} \end{array}$
- xix Analysis of 1,500 survey responses from participants
- xx Tennessee State Board of Education (2012, July). Tennessee Learning Centered Leadership Policy

- xxi Tennessee Department of Education (2013, May). Tennessee Invests \$4 Million in Race to the Top Funds to Develop School Leaders. Retrieved from http://news.tn.gov/node/10653
- xxii Tennessee State Board of Education (2012, July). Standards for Professional Learning. http://www.tn.gov/sbe/2012_documents/July_2012/III_F_Standards_for_Professional_Learning.pdf
- xxiii Tennessee Department of Education (2013, September)
- xxiv Tennessee Department of Education (2013). Teacher Evaluation in Tennessee: A Report on Year 2 Implementation
- xxv Tennessee Consortium on Research, Evaluation, and Development (2013, October). Educator Evaluation in Tennessee: Initial Findings from the 2013 First to the Top Survey.
- xxvi Tennessee Department of Education (2013). Classroom Chronicles: Tennessee Teachers Wigh in on Teacher Evaluations by Nate Schwartz. Retrieved from http://tnclassroomchronicles.org/survey-captures-teacher-perceptions-of-evaluation-system/
- xxxyii Tennessee State Board of Education (2013). Educator License policy. Retrieved from http://www.tn.gov/education/lic/doc/SBE_5-502.pdf
- xxviii Tennessee STEM Innovation Network (2013, December). Email communication
- xxix CNA Education (2013, July). The Northeast Tennessee College and Career Ready Consortium: The 2012/13 school year July 2013 Formative Report. Retrieved from http://www.niswongerfoundation.org/pdf/CNA%20Report.pdf
- xxx http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/tennessee.pdf
- xxxi OECD (2013). Skilled for Life? Key Findings from the Survey of Adult Skills. Retrieved from http://www.oecd.org/site/piaac/SkillsOutlook_2013_ebook.pdf
- xxxiii OECD (2013). Skilled for Life? Key Findings from the Survey of Adult Skills. Retrieved from http://www.oecd.org/site/piaac/SkillsOutlook 2013 ebook.pdf
- $\begin{array}{l} {}^{\text{xxxiii}} \text{ Tennessee General Assembly (2010, January). Public Chapter No. 3, Senate Bill No. 7006. Retrieved from http://www.tn.gov/thec/complete_college_tn/ccta_files/ccta/Pub%20Chap%203%20-%201st%20Ex%20Sess.PDF \\ \end{array}$
- xxxiiv Tennessee College Access and Success Network (2013). Retrieved from http://www.tncollegeaccess.org/grants
- xxxv Mike Krause (personal communication, December 6, 2013, December).
- xxxvi Drive to 55: tnAchieves (2013). Retrieved from http://www.driveto55.org/media/files/tnachievesstats.pdf
- $^{\rm xxxvii}$ Tennessee Department of Education (2013, October 7). STEM and CTE presentation at the TSIN Fall Convening
- xxxviii Drive to 55 Overview (2013). http://www.driveto55.org/
- $_{
 m xxxix}$ Tennessee Department of Education: 2013 TCAP Results. Retrieved from http://tn.gov/education/tcap/
- xl ACT (2013). The Condition of College and Career Readiness 2013. Retrieved from http://www.act.org/ research/policymakers/cccr13/index.html
- xii ACT (2013). The Condition of College and Career Readiness 2013 Tennessee. Retrieved from http://www.act.org/ newsroom/data/2013/states/pdf/Tennessee.pdf
- xiii ACT (2013). The Condition of College and Career Readiness 2013. Retrieved from http://www.act.org/ research/policymakers/cccr13/index.html

