

For more than a decade, Tennesseans have embraced the idea that every student should graduate from high school ready to start postsecondary education, military service, or a career. Despite some noteworthy signs that students are better prepared than ever before – including historically high graduation rates and average ACT scores – the majority of Tennessee's recent graduates are not ready for opportunities after high school as measured by student learning outcomes, including postsecondary certificate and degree attainment, earnings, and civic engagement. In order for every Tennessean to achieve success in college, career, and life, they must receive a high school education that prepares them for the 21st century.

High school in its current form was created for a time of the past – a time when many students entered the workforce directly after high school and only some went on to postsecondary training. To ensure every student can have a career that enables economic independence and the opportunity to live a fulfilling life, Tennessee needs to rethink high school and how to prepare students for success in a constantly changing workforce that requires more of them than ever before. During a learning tour of Tennessee high schools in October 2018, the State Collaborative on Reforming Education (SCORE) found evidence that communities across the state are taking important first steps to improve student preparation. However, with improving student success as the goal, Tennessee should consider four questions to reimagine high school:

- 1. What experiences, knowledge, and skills do high school students need to be successful in college, career, and life?
- 2. If communities were to design these experiences from the ground up, would students have the same high school experience as they have today?
- 3. What is working in the current high school model and should be kept while reimagining the system to ensure the success of each student?
- 4. What information or support do educators and community leaders need to successfully design high school experiences that meet the needs of every student?

This policy brief highlights Tennessee's opportunity to reimagine high school. It reviews student outcomes and trends, recaps policies and practices that can transform high school, identifies themes from the high school learning tour, and offers national examples of high school and district redesign to help Tennessee and its communities reimagine the high school experience. To truly prepare students to succeed in a rapidly evolving and highly demanding world, Tennessee's high schools will need a spirit of innovation and urgency.

# An Incomplete End In Tennessee's High Schools

In 2018, Tennessee's high school graduation rate was at a historic high, with nearly 90 percent of students achieving what should be a critical milestone in their education. The average ACT score was 20.2, the highest it has ever been. With the launch of Tennessee Promise in fall 2015, more Tennessee students than ever before have access to affordable postsecondary education after high school. With the release of Tennessee Succeeds, the state plan for the federal Every Student Succeeds Act of 2015, there is a greater emphasis on students enrolling in early postsecondary opportunities in high school.

There is abundant evidence, however, that a Tennessee high school diploma does not mean students are well prepared for postsecondary education, the workforce, or economic and civic life:

**Underprepared And Needing Remediation:** Data show that Tennessee students are struggling academically long before they get to college. In 2018, statewide assessment data showed large numbers of students performing below grade-level expectations in required courses: 76 percent in Algebra I, 65 percent in English II, 72 percent in US History and 50 percent in Biology.¹ Unsurprisingly, this trend continues into college. Almost half (46 percent) of Tennessee college freshmen required remedial math, and a third (30 percent) required remedial reading. ²

**Inexperience With Postsecondary Demands:** Less than half (44.3 percent) of Tennessee's high school students have been exposed to the rigor of college-level coursework through early postsecondary opportunities (EPSO), which research has shown improve student likelihood for success in postsecondary education.<sup>3</sup> EPSO enrollment is exceptionally low for students of color (29.6 percent), from high-poverty families (27.7 percent), who are English learners (19 percent), or with disabilities (13 percent).

**Dropping Out Of Postsecondary Education:** Less than half (42.7 percent) of community college and four-year university students graduate within six years of enrolling. Less than one-third (28.4 percent) of African-American and less than one-fifth (18.8 percent) of Hispanic students in Tennessee graduate in six years across all postsecondary institutions, trailing national averages.<sup>4</sup>

**Unprepared For Careers:** Six of 10 job postings in Tennessee require at least an associate degree, yet only 43 percent of Tennesseans have earned any postsecondary credentials.<sup>5</sup> If Tennessee meets its Drive to 55 postsecondary attainment goals, annual wages and benefits in the state could grow by more than \$9 billion.<sup>6</sup>



**Earning Low Wages:** For the one-third (36 percent) of high school graduates who entered the workforce directly without postsecondary training, average annual earnings were approximately \$11,500 annually – \$600 below the federal poverty level for a single person.<sup>7</sup>

**Disengagement From Community:** Economic opportunity and upward mobility are important enablers of community engagement and the development of thriving communities. Tennessee ranks near the bottom of the country (40th) for youth voter turnout, and only one in five young adult Tennesseans engaged in volunteer work.<sup>8</sup>

While high school is the time when students make numerous important decisions around postsecondary plans, career aspirations, and personal interests, recent research also suggests that high school students are often disengaged in class.<sup>9</sup> Reviewing student achievement gains over the last quarter century, researchers have also found evidence suggesting that high schools struggle to help students build on the learning gains in previous years.<sup>10</sup> From the assignments students are expected to complete to the choices that students are expected to make, high schools have a special responsibility to empower students with the learning experiences that set them up for career and for life.

Tennessee has made strides in raising academic expectations in high school and improving career and technical education (CTE). Yet the preceding statistics show how far the state will have to go to ensure all high school graduates are ready for success in college and career. While high schools do not bear sole responsibility for these outcomes, Tennessee high schools can and must consistently show all students their on-ramp to postsecondary and career success.



# An Opportune Moment To Redefine High School In Tennessee

High schools should be the focal point where students can combine rigorous and relevant academic preparation and skill development with career aspirations and a passion for lifelong learning. Research has shown that early postsecondary opportunities, work-based learning, career pathways, and high-quality advising can make student success in postsecondary studies and work more likely.<sup>11</sup>

Tennessee students are beginning to benefit from the state's first steps to improve readiness for life after high school:

- Tennessee expanded access to postsecondary education
  with Tennessee Promise. The last-dollar scholarship program
  acknowledges postsecondary education as a necessity for 21st century
  students, shifting the conversation from "whether they go" to "where
  they go."
- Working with business, industry, and community leaders, Tennessee conducted a multi-year effort to align CTE pathways with state workforce and industry opportunities. This alignment included expanding EPSO access and funding.
- The Ready Graduate indicator begins aligning Tennessee's
  accountability system with postsecondary and career preparation
  expectations for all students, empowering schools and communities
  to assess trends and better prepare each student to achieve multiple
  postsecondary and career goals.

• The first students to benefit from a more robust K-8 academic experience through Tennessee's rigorous academic standards will soon enter high school. These standards were developed with the end in mind – preparing every student to graduate ready for success in college and career – and has helped close the "honesty gap" between student proficiency rates on the National Assessment of Education Progress and the state's annual assessments.

However, the academic structures used in many high schools in Tennessee and across the country were largely designed for an earlier era. Education in the 20th century emphasized basic aptitude for stable employment, with narrowly focused instruction in discrete and disconnected subjects and a sorting of students toward adult opportunities that varied greatly in quality. Previous attempts at improving high schools were built on top of this outdated model. To truly prepare students for a changing future that will demand more of them than ever before, Tennessee's high schools will need to urgently embrace a spirit of innovation.



In October 2018, SCORE conducted a learning tour of high schools across Tennessee to better understand how different high schools approach preparing students for college and career. On each full-day visit, SCORE interviewed educators, leaders, and students and conducted classroom observations. The schools ranged in size from 114 to 2,170 students and are located in urban, suburban, and rural settings and across Tennessee's three Grand Divisions. They were selected for the broad portrait they paint of the high school experience in Tennessee. Each of the high schools sought to improve specific challenges they uncovered when looking at their student outcomes.

Looking at the practices and programs across all of the schools SCORE visited, several themes emerged:

Partnerships And Alignment: Schools, districts, regions, and communities often looked beyond school walls to offer a wider set of student opportunities by developing partnerships with postsecondary institutions, industry, and community groups. For some communities, there were significant, multi-year efforts to redesign high school offerings to improve alignment with high-quality careers and flexibly meet student needs. Teachers often referred to this work as important opportunities for students beyond core academic instruction.

 Through its STEM in Motion program, Memphis Academy of Science and Engineering partners with prominent local employers to provide work-based learning for students during the 12th grade.

#### **High School Learning Tour**

In October 2018, SCORE visited nine Tennessee public high schools on a learning tour. SCORE, supported by TNTP, spent a day at each school, observing classes and talking with educators and students about the school's approach to college and career readiness.

**School:** D-B EXCEL, 222 Students **District:** Kingsport City Schools **Approach:** High School Redesign

Through D-B EXCEL, Kingsport City Schools has re-envisioned the high school experience to offer an alternative for students seeking a nontraditional setting. After reviewing student postsecondary outcomes and realizing that not every student was successful, district leaders built a high school experience that specifically served nontraditional students. D-B EXCEL offers a flexible schedule and an intense focus on blended, personalized learning. Students take online classes that allow them to learn at their own pace and to complete coursework in the evenings or on weekends to accommodate work or extracurricular schedules. D-B EXCEL engages students in rigorous, standards-aligned instruction with a focus on project-based learning that allows students to demonstrate content mastery through products, performances, or presentations rather than traditional assessments or work products.

School: Dyer County High School, 1,207 students District: Dyer County Schools Approach: Empowering Students To Explore All Options

It's not uncommon for high schools to ask students to choose either a college pathway or a career pathway early in their high school careers, and sometimes even before they get to high school. At Dyer County High School, students are encouraged to explore both, and faculty and counselors are intentional in putting career development on equal footing with traditional postsecondary education pathways. The school's focus is on exposing students to a variety of options for their futures. All freshmen are required to take a Career Exploration course to help them identify potential pathways. Dyer provides students with opportunities to earn college credit before they graduate through dual-credit and AP courses while simultaneously exposing students to career pathways that do not require a postsecondary degree by offering CTE courses.

School: Memphis Academy of Science and Engineering, 456 students District: Shelby County Schools Approach: Work-Based Learning For High-Demand Jobs

The Memphis Academy of Science and Engineering, a public charter school, partners with prominent employers in the healthcare sector, including children's hospitals and a medical equipment firm, as well as a technical school and community-based organization to provide work-based learning for students who are selected into the STEM in Motion program.. Students shadow employees in different roles, journal about their experience, and debrief once they return to school. During their hands-on experiences, they may work in a pharmacy lab, provide solutions for fixing joint and knee

- A local business provides industry-trained educators to John Overton
  High School so that students can take HVAC career and technical
  education courses— addressing staffing challenges in CTE courses and
  shortages in the workforce.
- After reflecting on postsecondary completion outcomes, Kingsport
  City Schools developed D-B EXCEL by partnering with educators,
  businesses, and the community to offer a personalized high school
  experience for students seeking a nontraditional setting.

**Student Exploration And Exposure:** Students consistently said they wanted to explore high-quality careers and be exposed to postsecondary options, with increasing intensity as students progressed toward high school graduation. Students who had a rich set of exploration and exposure opportunities could more clearly describe the development of their strengths and interests as well as decisions made aligned to their personal goals.

- Hamilton County Schools uses 13 Future Ready Institutes to provide career- and theme-based learning experiences that promote depth of learning without locking students into a concentration.
- Clarksville-Montgomery County Schools is rethinking school structures
  to support college and career preparation by introducing career
  academies, early college, and early technical college opportunities
  throughout the school district.
- After collaborating for years with a local community college, Oneida
  High School partners with a local Tennessee College of Applied
  Technology (TCAT) to expand access to CTE courses while limiting the
  financial burden of offering these courses on a rural school district.

Advising and Pathways: School, district, and community leaders worked to identify, strengthen, or develop pathways that often included a mixture of high-quality early postsecondary opportunities and career and technical education to ensure that students left high school with more options for college and career. Personalized advising was an important feature to ensure that each student could take advantage of these pathways. Students wanted more advising conversations with adults – such as school counselors and college advisers – who could help them reflect on their growth, make necessary adjustments in their learning, and connect them to important college and career opportunities.

- Dyer County High School students are encouraged by faculty and counselors to explore both college and career pathways, putting career development on equal footing with traditional postsecondary pathways.
- Through the support of the Ayers Foundation, Perry County High School provides specialized college counseling that follows students to and through college and contributes to a college-going rate of 80 percent.

implants, or obtain machining technology certifications. Many students are simultaneously enrolled in related dual enrollment coursework through a local university. These work placements are aligned with projected high-wage, high-demand jobs in Shelby County and across the state.

School: Middle College at APSU, 114 students
District: Clarksville-Montgomery County Schools
Approach: District Redesign

Clarksville-Montgomery County Schools is rethinking school structures across the district to support college and career preparation. The district has expanded dual-enrollment and online course offerings, continually refined CTE offerings based on student-interest data and projected career openings in the state, and launched seven career academies in their traditional high schools. In addition, the Early Technical College at TCAT offers students the opportunity to blend the high school experience with industry certification. Students who prefer a less traditional setting can apply to attend the in-district Middle College at Austin Peay State University for their junior and senior years of high school. Students take a combination of high school and tuition-free college courses and select a transition pathway to earn a minimum of 30 college credit hours or an associate pathway that leads to a high school diploma and associate degree from APSU.

School: Oakland High School, 2,170 students District: Rutherford County Schools Approach: Advising Along A Career Pathway

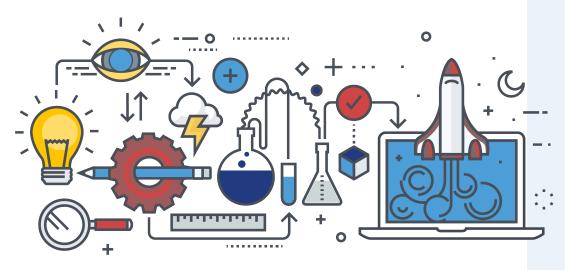
Working with industry and community partners over several years, Oakland High School aligned course and program offerings to meet local and state workforce needs. As school and district leaders built pathways for 2.200 diverse students from families with different postsecondary education experiences, school and district leaders realized that students needed different supports to navigate the school's options. One such support is providing intentional advising support for each of its approximately 2,200 students. All four counselors meet with each of their nearly 600 incoming freshmen each year to discuss their plans for high school and beyond. Each counselor follows their group of students over their four years of high school, ensuring the person responsible for supporting students knows each student and supports them toward the path that best fits the student. This continuity of care throughout the high school years is a critical aspect of ensuring students have a wide range of meaningful college and career choices.

School: Oneida High School, 426 students District: Oneida Special School District Approach: Local Partnership With TCAT

Oneida High School is a small, rural school. Administrators admit that they cannot offer cutting-edge technology to their students in their school building. But through a close partnership with their local Tennessee College of Applied Technology, Oneida High expanded access to CTE courses, limiting their financial burden and creating a more expansive set of offerings to students. These CTE opportunities add important career-development opportunities that build upon a long-standing partnership with Roane State Community College focused on dual enrollment

 After Oakland High School built local and state workforce-aligned pathways in addition to traditional college preparation programming, the school prioritizes individualized advising to help its 2,200 students navigate course and pathways choices.

Each of the schools recognized a need to increase college and career readiness. The practices and programs observed on the tour show a clear and growing interest in Tennessee to provide more support and opportunity to high school students. However, these efforts represent only some of the pieces that national research suggests are necessary for student success. Tennessee student outcomes suggest that even with the emerging focus and early efforts to improve high school, too many students would fall short of their aspirations. Much more needs to be done to truly prepare students for life success. Tennessee communities need to be bold in reimagining a vision for the high school experience.



# Reimagining High School As A Community

Tennessee needs a comprehensive yet flexible approach that offers each student personalized pathways to success. While each Tennessee community will need to chart its own course, there are many opportunities to learn from examples around the country where communities and education stakeholders took bold steps to redesign high school from the ground up.

There is no one-size-fits-all model for high school. The two examples highlighted here are neither all-inclusive nor mutually exclusive of the concepts used to redesign high school, and, over time, there is much more to learn about how these changes improved student outcomes. However, they are provided to help educators and community leaders start imagining what a redesigned high school experience that meets student needs could look like.

School: Overton High School, 2,019 students District: Metro Nashville Public Schools Approach: Local Partnership With Business

Beginning in the 2018-19 school year, with the support of PENCIL Partners, Overton High School entered into a partnership with a local heating, cooling, and electrical business to add an HVAC course to its CTE course offerings. Finding qualified, industry professionals to teach CTE courses is challenging. To address this, the business recruited and funded an instructor for this course, which allows Overton to offer opportunities to students it otherwise wouldn't have been able to afford. In addition to the course, the business also offers internships and employment opportunities for students to help them explore a future career in the field. This partnership is built on top of long-standing career academies for Overton's diverse population.

School: Perry County High School, 337 students
District: Perry County Schools
Approach: School Counseling And Advising

The Ayers Foundation's partnership with Perry County High School illustrates the impact of high-quality advising and counseling support. The Ayers Foundation has invested in counselors specifically focused on college-going and financial aid support at eight schools across the state, including Perry County High School. With three total counselors, one funded by the Ayers Foundation, Perry County's counseling and advising team members each specialize in social and emotional health, student scheduling and support, and college advising. As students enter postsecondary education, the Avers Foundation adviser supports them through postsecondary completion. With over 300 students in a rural community, Perry County High School has a college-going rate of 80 percent.

School: Soddy Daisy High School, 1,235 students
District: Hamilton County Schools
Approach: Future Ready Institutes

The Future Ready Institutes in Hamilton County Schools were established in the 13 Hamilton County high schools to provide career-themed learning experiences. The Trojan Institute for Media and Entrepreneurship (T.I.M.E.) at Soddy Daisy High School is one such Institute. Students in the institute focus intensely on one of three concentrations: media, web development, or marketing, but are not locked into their choices. Core instruction is integrated into project-based learning and students can work toward industry certification (Adobe or W3Schools) or dualenrollment credit in business courses. Soddy Daisy is currently partnered with a local startup organization to arow students' entrepreneurial skills and a local technology and arts education organization to provide real-life web design opportunities, with plans to expand its community partnerships. T.I.M.E. students participate in coding events, attend industry-related field trips, mentor younger students at feeder schools, and learn noncognitive skills required for a successful future in any industry.



## Centers for Applied Science and Technology (CAST),

San Antonio, Texas: CAST is a network of industry-led, career-themed public charter schools in San Antonio developed in partnership with multiple local public school districts, higher education institutions, and business leaders. Students in the CAST Network have opportunities to graduate not only with a high school diploma but also with work experience, industry certificates, and an associate degree aligned to a high-demand career. The first school in the network, CAST Tech, opened in 2017 with 150 students who are interested in technology and will grow to 600 students when it is at capacity. Drawing students from the surrounding county and city school districts to create an intentionally diverse student body, students at CAST Tech benefit from several practices:

#### Aligned Vision Across Education, Business, Community:

With an aligned vision across sectors, the school operates with clarity of mission, and educators are empowered to develop the experiences that meet student needs. Business and school district leaders worked together to identify opportunities, resources, and talent to develop CAST. The first CAST school was built around technology, with future CAST schools to be built around other high-demand fields, such as health sciences and STEM. Before the school opens, the school leader is given a full planning year to develop an operational vision of the school in partnership with an industry advisory board. The CAST schools rely on industry partners, philanthropy, and other public funding for support during the startup years and eventually will be self-sufficient.

Students As Problem Solvers: Students are engaged in learning that is tied to real-world problems and are challenged to develop solutions to those problems. For project-based learning, teachers co-create projects with business leaders to identify a real-time business problem and, working across subject areas, reverse engineer learning opportunities that set up students to develop solutions to the problem.

Relationships And Relevant Learning: In addition to class time structured around blended learning, research, and labs, students benefit from learning opportunities – internships, career exposure, and mentorship—that are made more relevant by the participation of businesses and community organizations. Local nonprofits, volunteers, and businesses help coordinate field trips and internships that build on the core academic learning facilitated by teachers. District leaders intentionally selected the school leader based on past success and an innovative mindset, in addition to staffing CAST Tech with master teachers who put rigor and relevance on equal footing with building student relationships.

**Student Discernment:** Students build the ability to discern choices through advice and exposure delivered by knowledgeable adults who have strong relationships with students. In grades 9-10, students develop computer science and business skillsets while getting exposure to learning aligned to the school's entrepreneurship, cybersecurity, and user experience pathways. In 11th and 12th grades, students engage in coursework along those pathways that lead to industry certifications and up to two years of college credits. CAST invests in exposure activities that ensure each student knows everything that is available to them, while teachers serve as coaches and mentors for students.

### Lindsay Unified School District, Lindsay, California:

Lindsay Unified serves approximately 4,200 students in California's rural Central Valley. Lindsay Unified launched a strategic plan in 2007 to redesign schools across the district and prioritize the empowerment of students as active participants in their learning. The redesign plan – implemented in part with investments from beyond the school district – was developed in response to widespread student disengagement and low staff morale. Through sustained commitment and leadership, the district was able to iterate and improve on their model to ensure student learning is front and center when redesigning a school district from the ground up. Today, Lindsay's 1,000 high school students benefit from these practices:

**Building Lifelong Learners:** The school redesign process included the development and integration of the district's lifelong learning standards, such as self-direction and civic-mindedness. By tending to student nonacademic learning and growth, learning experiences have built upon each other and empowered students to be better prepared to thrive after high school.

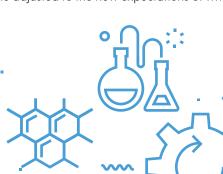
Performance-Based Learning: Assisted by a learning management system, students progress at their own pace when they demonstrate mastery. Mastery on learning objectives is explicit and accessible through rubrics and exemplars so students know when they have met expectations. From traditional writing assignments to public presentations to the community, each student is given opportunities to demonstrate learning in multiple ways. In addition, students who meet expectations on an objective are both encouraged and afforded the opportunity to go deeper into specific areas to gain greater understanding of the content and demonstrate advanced knowledge.

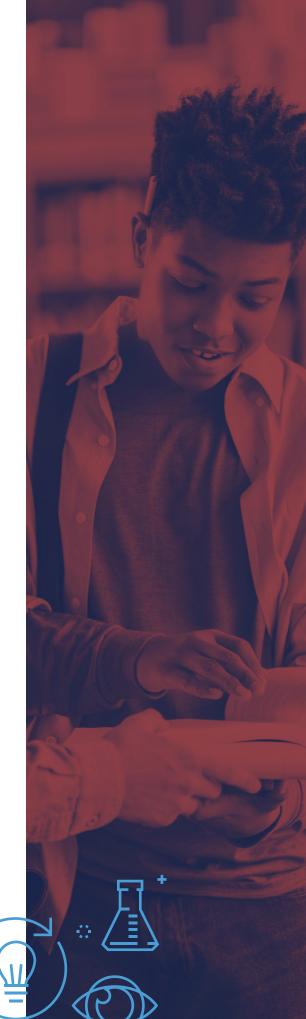
Flexible Scheduling Driven By Student Needs: The schedule has built-in flexibility to ensure students are given opportunities to either catch up or move ahead as needed. Through Personalized Learning Time, a twice-weekly, 90-minute period, students either sign up to work with teachers on self-identified areas of need or pursue electives. This approach, paired with the support of educators throughout the building, empowers students to continually monitor their own progress and engage with content at a pace and approach that meets their needs.

**Sustained Community Engagement And Continuity:** After engaging the community to develop the district's strategic redesign process, the district continued to engage with parents and community members to ensure that the district was working towards the outcomes identified by the community. Through stable and focused leadership, the district has built sustained buy-in from students, educators, and the community as everyone adjusted to the new expectations of what school should look like.









### **Conclusion**

Across Tennessee, students are learning in high schools using models developed for the needs of the 20th century rather than the workforce opportunities of the future. As a result, most Tennessee students do not graduate fully prepared to succeed in college, career, and life. While important improvements are underway, forward-looking communities seeking to be innovative in high school design should focus on a key set of guiding questions:

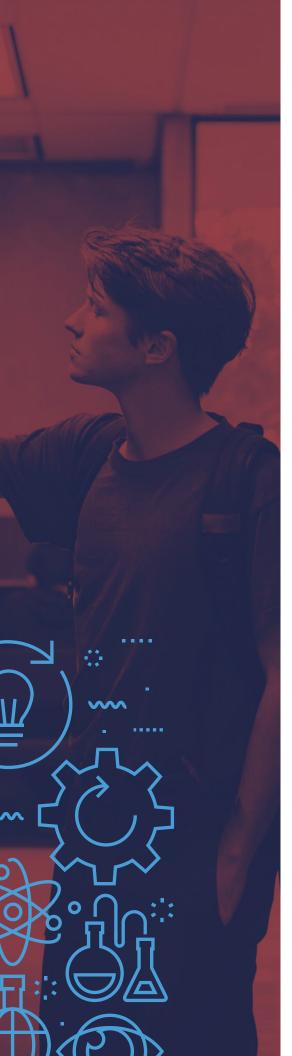
What experiences, knowledge, and skills do high school students need to be successful in college, career, and life? Starting with the future of Tennessee's students in mind, communities should consider what the "real world" will demand of its students. With critical thinking and higher levels of educational achievement as a foundation, communities can develop a deeper understanding of the local and regional economic outlook to determine the types of experiences and opportunities students should be exposed to in the critical high school years.

If communities were to design these experiences from the ground up, would students have the same high school experience as they have today? As communities lead innovations of their high school models, new challenges inevitably will emerge. A sustained commitment to a shared vision of what students need will be required in order to move beyond what has traditionally been provided. Communities that start with student needs in mind will design learning environments that will prepare students for a rapidly evolving world.

What is working in the current high school model and should be kept while reimagining the experience to ensure the success of each student? Communities should consider current practices that can be leveraged as a foundation to support students to leave high school with a meaningful diploma and a clear path forward. Tennessee should continue to insist on a core academic experience defined by rigorous academic standards and aligned assessment that opens doors to opportunity. Communities should work together with schools to design a school model that builds on the core of what students need to know for the world today and offers high-quality experiences, opportunities, and structures for the world of tomorrow.

What information or support do educators and community leaders need to successfully design high school experiences that meet the needs of every student? As with any change, when educators and community leaders pursue innovation in the high school model, communities will need support to understand why and how the high school experience must change. Local leaders should consider how they can overcome any roadblocks and work together with educators to transform student experiences. Schools cannot accomplish this alone, and full-scale high school redesign will take the strong backing of communities.

Tennessee must work toward a future where each student is able to define and achieve their vision of success. This future expects that students are well prepared to discern important choices that impact their lives. This future depends on students having learned both relevant skills and knowledge as well as how to learn for a lifetime. This future requires all Tennesseans to rethink what high schools are and ought to be. By embracing the opportunity to reimagine the high school experience, Tennessee can ensure success, not just for future graduates but for the state as a whole.



### **About SCORE**

The State Collaborative on Reforming Education (SCORE) is a nonpartisan nonprofit education policy and advocacy organization based in Nashville, Tennessee. SCORE was founded in 2009 by Senator Bill Frist, MD, former US Senate majority leader, and works to transform education in Tennessee so all students can achieve success in college, career, and life.

#### **Notes**

Tennessee Department of Education, Data Downloads

<sup>2</sup>Tennessee Higher Education Commission. College Readiness and Remediation, Presentation to the Tennessee Senate Education Committee, February 13, 2019.

<sup>3</sup>Tennessee Department of Education

<sup>4</sup>Lumina Foundation. A Stronger Nation: Learning Beyond High School Builds American Talent. http://strongernation.luminafoundation.org/report/2019/#state/TN

<sup>5</sup>Achieve, Inc. The State of American High School Graduates: What States Know (and Don't) About Student Performance, Tennessee State Profile. (2017)

<sup>6</sup>Tennessee Department of Economic and Community Development. Economic Benefits of Postsecondary Credentials: Incremental Earning and Revenues Upon Drive to 55 Achievement. (February 2016).

<sup>7</sup>Tennessee Department of Education

<sup>8</sup>Think Tennessee and Complete Tennessee. State of Our State: Education and Youth Civic Engagement. (December 2018)

<sup>9</sup>TNTP. The Opportunity Myth: What Students Can Show Us About How School is Letting Them Down – and How to Fix It. (September 2018); Mehta, Jal, and Sarah M. Fine. *In Search of Deeper Learning: the Quest to Remake the American High School.* Harvard University Press. (2019); Gallup. 2016 Gallup Student Poll. (2016); Boser, Ulrich. "Revisited: Do Schools Challenge Our Students?" Center for American Progress. (May 2017)

<sup>10</sup>Hanushek, Eric A., Paul E. Peterson, Laura M. Talpey Ludger Woessmann, "The Achievement Gap Fails to Close," Education Next (Summer 2019).

"Work-Based Learning and Pathways: Kemple, James. Career Academies: Long-Term Impacts on Work, Education, and Transitions to Adulthood. MDRC. (June 2008); Cahill, Charlotte. Making Work-Based Learning Work. Jobs for the Future. (July 2016). Advising and Exploration: Bryan, Julia, Cheryl Moore-Thomas, Norma L. Day-Vines, and Cheryl Holcomb-Mccoy. "School Counselors as Social Capital: The Effects of High School College Counseling on College Application Rates." Journal of Counseling & Development 89, no. 2 (April 2011); Robinson, Karen Jeong, and Josipa Roseka. "Counselors, Information, and High School College-Going Culture: Inequalities in the College Application Process." Research in Higher Education 57, no. 7 (November 2016); Maldonaado, Coleen, and Tobie Baker-Wright. Career and College Exploration Experiences: Planning for Success. Jobs for the Future. (June 2016). EPSO: An, Brian P. "The Impact of Dual Enrollment on College Degree Attainment: Do Low-SES Students Benefit?" Educational Evaluation and Policy Analysis 35, no. 1 (March 2013): 57–75; Blankenberger, Bob, Eric Lichtenberger, and M. Allison Witt. "Dual Credit, College Type, and Enhanced Degree Attainment." Educational Researcher 46, no. 5 (June 2017): 259–63.





1207 18th Avenue South, Suite 326 Nashville, TN 37212

615.727.1545

## **TNSCORE.ORG**



youtube.com/TNscore4schools