

The Tennessee Commission on Education Recovery and Innovation



Year Two Report A Revitalization: Transforming Education in Tennessee

November 30, 2021

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Legal Authority

On June 17, 2020, the House of Representatives joined their Senate colleagues in unanimously passing Senate Bill 1974, thereby creating the nine-member Tennessee Commission on Education Recovery and Innovation to examine short- and long-term systemic effects on the state's educational systems of the COVID-19 pandemic and natural disasters of 2020. This act later became Public Chapter 792, which recognized in law that the pandemic will likely affect students for the next 12 years and charged the new Commission to do the following:

“Advise and make recommendations to the General Assembly, the state board of education, the department of education, the Tennessee Higher Education Commission, and the state institutions of higher education on strategies to close educational gaps resulting from school closures, and to modernize the state’s educational structure from kindergarten to career to create more flexibility in the delivery of education to students.”

The Commission's work involves three deliverable reports as detailed in the law:

“The Commission shall submit an initial assessment of the effect the COVID-19 pandemic has had on Tennessee’s educational systems to the General Assembly no later than January 1, 2021. The Commission shall submit a report on the Commission’s actions, findings, and recommendations to the General Assembly no later than January 1, 2022 and shall submit a final report on the Commission’s actions, findings, and recommendations to the General Assembly no later than June 30, 2022.”

This report, the second of three, is required by the statute and is designed to detail the Commission's actions, findings, and recommendations to the General Assembly.

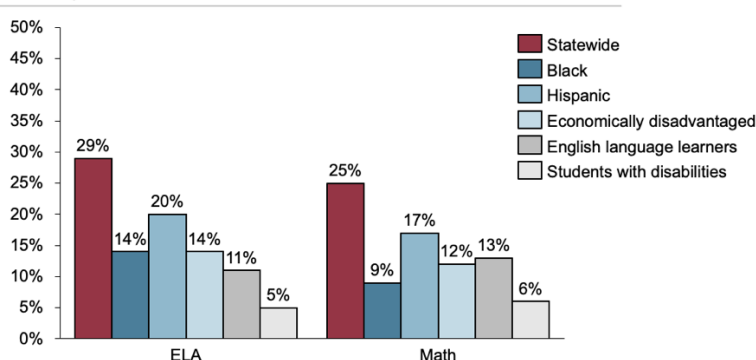
Executive Summary

A high-quality education paves a path to political and economic freedom and upward mobility.¹ Most Tennesseans are not on that path.

While Tennessee has made some important educational improvements over the past decade, they have not changed the fact that the majority of our students do not have the knowledge and skills they need to be successful in their lives and careers. Less than one-third of all Tennessee K-12 students are scoring as proficient or higher in English language arts (29%), and just a quarter are doing so in math (25%). Tennessee's more vulnerable students meet these benchmarks at even lower rates (see graph below).

Percent of Students Meeting or Exceeding Grade-Level Benchmarks in ELA and Math

All grade levels
School year 2020-2021



Tennessee's high school graduation rate is excellent at 90%; however, that reflects only partial success. For most graduates, possessing a diploma does not reflect readiness for success beyond high school. Only 41% of all graduates meet the state's **Ready Graduate** benchmark, which measures the percentage of students who earn a diploma from a Tennessee high school and meet success milestones that increase their probability of seamlessly enrolling in postsecondary education and securing high-quality employment.² Ready Graduate rates were far worse for Black students (21%), Hispanic students (26%), economically disadvantaged students (21%), English language learners (6%), and students with disabilities (8%).³ Overall, higher education enrollment rates dropped by approximately 4% between fall 2020 and fall 2021, with variation across institution types: Community colleges saw an enrollment decline of 7%, locally governed institutions saw a decline of 4%, and the University of Tennessee system saw an increase of almost 1%.⁴

The state's economic and workforce needs are changing rapidly — a reality that underscores the urgency of addressing these issues. The Tennessee labor market is projected to net 356,000 jobs over the next decade, and more than half of those jobs (53%) will require workers with some training or education beyond high school (often referred to as “middle-skill” workers).⁵ Thirteen of the 15 high-demand occupations with the highest projected growth rates over the next decade will require education beyond high school.⁶ However, reports from 2019 indicate that just 36% of Tennessee adults hold a postsecondary degree (an associate's or higher), and 29% hold a four-year degree or higher.⁷

These academic and workforce-related challenges existed well before recent natural disasters and COVID-19 forced the transition to online learning and disrupted the education of hundreds of thousands of students across the state over the course of nearly two years. These recent events only exacerbated the challenges. The effects of school closures and educational disruption hit vulnerable groups of students — those who are Black, Hispanic, economically disadvantaged, or learning English and those who have disabilities — the hardest.⁸

The impacts of COVID-19 and other disruptions to schooling in the past two years extend far beyond academics, however, and have negatively impacted students' overall well-being, including their mental and emotional health,⁹ physical health,¹⁰ and social development.¹¹ Tennessee's students have asked for greater empathy, counseling, and emotional support to help them deal with the effects of pandemic-related school closures.¹² These domains not only affect students' academic achievement but also underlie the development of skills such as critical thinking and analysis, problem-solving, self-management, and working with people — all of which are skills increasingly prioritized by employers.¹³

To begin to address the challenges presented by COVID-19, the state has already undertaken a number of actions, including:

- Offering flexibility in testing administration to maximize districts' ability to meet participation goals.
- Distributing nearly \$3.5 billion in Elementary and Secondary School Emergency Relief (ESSER) funding directly to districts to help them meet their most pressing needs.
- Calling a special legislative session in January 2021, which resulted in the passage of legislation specifically aimed at addressing students' learning recovery needs.
- Making strategic investments in a variety of programs to support districts and students, such as summer programming, tutoring, and the Reading 360 initiative.

Since the release of the Commission's first report in December 2020,¹⁴ Commissioners have undertaken a comprehensive approach to examining Tennessee's education landscape from kindergarten to career, hearing from dozens of experts and reviewing hundreds of pages of research and information on a wide range of education policy issues. This report is the result of that yearlong effort. It points to nine critical areas where additional focus and acceleration of ongoing effort are needed to address gaps exacerbated by recent events and restructure the system into one that is more flexible, adaptable, and able to address the evolving needs of the state's labor market and economy. It offers a path forward aligned to the Commission's vision for the state: Every Tennessean will have high-quality education necessary for life.

The Commission has identified nine priorities for the legislature. Each priority is supported by a menu of actionable steps to be taken by a number of agencies and organizations, including the State Board of Education, the Tennessee Department of Education, the Tennessee Higher Education Commission, state institutions of higher education, and the Tennessee Department of Labor and Workforce. While some of these action steps are new, many build on and aim to accelerate work these departments and agencies are already doing.

The Commission believes that adopting these priorities will bring success, close educational gaps, and ensure every student in Tennessee has a solid foundation of knowledge and skills. These priorities are intended to reimagine the state's educational systems as flexible and responsive to learners at every stage, provide the right training and educational opportunity at the right time to enable long-term success, and ensure Tennessee talent is recognized as superior by employers to sustain a thriving state economy. Those nine priorities are:

- Ensure students master literacy and numeracy skills.

- Address learning **remediation** and **acceleration** needs.
- Strengthen, retain, expand, and diversify the state's education professionals.
- Equip schools and districts to address students' well-being.
- Optimize capacity for flexible, high-quality school options.
- Redesign high school to ensure students have access to flexible pathways to college and career.
- Streamline postsecondary systems to facilitate lifelong learning.
- Strengthen alignment across the K-12, postsecondary, and workforce systems.
- Incentivize locally led innovation.

Underlying these priorities is the Commission's recognition that each of Tennessee's 1 million K-12 students¹⁵ and 220,000 postsecondary students¹⁶ is unique and that the legislature must address the needs of all students — including those who are most vulnerable. As a result, the Commission enjoins the legislature to think beyond a one-size-fits-all model and move toward a personalized approach that allows young people and adults alike to receive education tailored to their needs and that, critically, allows for the acquisition of additional training and skills development as career opportunities evolve and the economy demands it. The success of these nine priorities hinges on the elimination of financial disincentives for systems to foster the best opportunities for students.

It is imperative the legislature act now to move beyond recovery to truly reimagining, renewing, and creating a renaissance in education and economic freedom for its citizens. This report offers recommendations for doing just that.

How to Read and Use This Report

The Commission designed this report to serve as a set of priorities for the General Assembly over the next decade and does not intend for all of the recommendations included here to be adopted at once. Rather, legislators can select among these recommendations to address pressing needs while also paving the way for creating a more flexible, responsive, and innovative system to meet the needs of Tennessee's citizens in the medium to long term.

To that end, this report is divided into two sections, aligned to the two charges outlined in the law establishing the Commission. Section I offers four priorities and corresponding recommendations to close educational gaps resulting from school closures, and Section II offers five priorities and corresponding recommendations to modernize the state's educational systems from kindergarten to career.

Each priority includes an overview of research and Tennessee-specific data to help readers understand its importance to Tennessee, as well as a list of specific recommendations the legislature should undertake to address that priority. Readers interested in learning more about the specifics of each recommendation should refer to the appendix.

The discussion of each priority is written to stand alone. Readers need not review the entire document to make sense of one or two priorities. Nor does addressing one priority rely on addressing one or more of the others. The same is true for the recommendations corresponding to each priority: legislators may select among those recommendations. While the Commission believes that all of the recommendations are important and that combining them will offer the best chance of fully addressing the totality and complexity of the core priority, commissioners also recognize and acknowledge some of the recommendations will take more time than others and thus recommend the legislature take an intentional and nuanced approach to prioritizing and adopting the recommendations included to enable successful implementation and, in turn, fully realize the potential positive impact for Tennesseans.

Two quick notes on terminology: First, there is a glossary on page 38 of this report where bolded terms and acronyms are defined.

Second, throughout this report, the Commission references “high-quality,” “**evidence-based**,” and “**research-based**” programs and policies and makes recommendations to implement “rigorous evaluations” of new and existing programs. When using these terms, the Commission is referring to policies, programs, and/or practices that have been studied and that have data demonstrating their effectiveness at addressing a particular problem (e.g., improving students' early literacy skills or strengthening teachers' instructional practice). The Commission encourages the legislature to consider the **Every Student Succeeds Act (ESSA)**'s tiers-of-evidence framework when determining which policies, programs, and practices have a strong basis in research as well as how to establish rigorous evaluation requirements.¹⁷ This framework includes five factors:

- Study design: The extent to which a study is well-designed and implemented based on accepted practices for education research (see the Department of Education's “What Works Clearinghouse Standards Handbook” for more detail about high-quality education research design¹⁸).
- Results of the study: Whether the program or policy has statistically significant¹⁹ positive effects on a relevant outcome.
- Findings from related studies: Whether other studies of the same policy or program yield similarly positive results.

- Sample size and setting: How many participants were included in the study and across how many schools or districts (larger sample sizes and studies conducted in more than one school or district are preferred).
- Match: How well the population and setting in the study matches the population and setting for which the program or policy will be implemented.

The Commission also recommends that any program created pursuant to this report should be evaluated for effectiveness after the fifth year of implementation.

It is important to note that the Commission does not believe that innovation should be prevented because promising practices are new and have not yet been studied, but that commitment to rigorously evaluating new programs and practices is an essential component of innovation. Investing in well-designed evaluation enables the state, education systems, and educators to scale what is working and to stop investing time and resources in what is not.

List of Priorities and Corresponding Recommendations

Priority	Recommendations
Ensure students master literacy and numeracy skills.	<ul style="list-style-type: none"> • Ensure recently enhanced and existing early literacy programs maintain financial viability, oversight, and accountability. • Establish rigorous and periodic evaluation of early literacy programs by independent evaluators (such as the Office of Research and Education Accountability (OREA)), and make those results public. • Create evidence-based professional development programs for teachers and leaders to improve math teaching and learning in order to respond to pandemic-related unmet learning, particularly for vulnerable populations. • Establish evidence-based curriculum recommendations for early numeracy. • Fund Tennessee's K-12 system and focus funding in the classroom on literacy and math initiatives, ensuring, through rigorous external evaluation and public reporting, that those dollars are resulting in significantly improved student literacy and math achievement.
Address learning remediation and acceleration needs.	<ul style="list-style-type: none"> • Expand long-term funding for tutoring programs designed in alignment with research-supported best practices to address known gaps in literacy and math. • Expand access to, and continue in the long term (including by providing long-term state funding for), programs created by recent legislation (e.g., bridge camps, after-school learning mini-camps, and summer learning camps) that are demonstrating effectiveness at accelerating student learning. • Support early interventions and research-based materials and instruction for K-12 students to minimize the need for postsecondary remediation. • Create an early warning data system (EWDS) and corresponding interventions, ensuring integration across existing data systems and equal access and support (including funding) for implementation across districts. • Establish metrics to track and periodically report on student remediation and acceleration and ensure those data are used to inform classroom practice.
Strengthen, retain, expand, and diversify the state's education professionals.	<ul style="list-style-type: none"> • Strengthen the classroom-based clinical practice for all teacher candidates across all preparation pathways to include components of high-quality, research-based clinical experiences. • Strengthen the curriculum in educator preparation programs for both teachers and leaders to ensure they have the knowledge and skills to meet students' diverse academic and well-being needs. • Create or expand high-quality, research-based, state-facilitated professional development opportunities to

	<p>support teachers in using data to inform their instruction and meet the needs of individual students.</p> <ul style="list-style-type: none"> • Increase educator compensation with the intent of elevating the profession and increasing competitiveness in Tennessee's educator labor market. • Expand and strengthen the existing Minority Teaching Fellows Program. • Provide technical assistance to districts, in particular rural districts, to establish partnerships with local educator preparation programs to create local Grow Your Own (GYO) programs. • Create a strong evaluation plan for Grow Your Own programs to ensure these programs result in high-quality educators being placed in Tennessee's classrooms. • Incentivize postsecondary institutions to work with their partner districts to cultivate new teacher pipeline programs. • Create new state-operated financial incentive programs for highly effective teachers and leaders.
Equip schools and districts to address students' well-being needs.	<ul style="list-style-type: none"> • Incentivize the expansion of existing, and the development of new, high-quality programs to support students' well-being. • Provide professional development to equip all staff to recognize students' well-being needs, especially adverse childhood experiences (ACEs), and know when and where to refer students for more support. • Fully fund school-based nurses, counselors, and social workers in line with Basic Education Program Review Committee 2021 recommendations. • Incentivize partnerships between education systems and existing mental and behavioral support systems to help educators and community members understand and leverage existing resources.
Optimize capacity for flexible, high-quality school options.	<ul style="list-style-type: none"> • Rigorously evaluate and hold current statewide internet infrastructure initiatives and future investments accountable to ensure goals and outcomes are met. • Incentivize the coordination and innovation of universal broadband access. • Require districts to maintain infrastructure, including devices, integrated technology platforms, and connectivity solutions, to seamlessly transition modes of instruction, and provide ongoing support and state funding. • Require periodic virtual "drills" both to ensure schools, students, and families can move seamlessly between virtual and in-person delivery modes and to identify and address infrastructure-related challenges. • Hold online schools receiving public funding accountable through existing school accountability structures. • Enjoin educator preparation programs to incorporate best practices for multiple modes of delivery, including remote instruction, into their instruction and field experiences for all teachers. • Provide ongoing professional development to K-12 educators to develop and strengthen remote instruction skills. • Require that all curricula purchased by districts have an integrated technology-based capability and that districts establish and/or maintain the infrastructure and training required to fully leverage curricular

	<p>resources across modes, allowing districts to seamlessly switch between delivery modes as necessary.</p> <ul style="list-style-type: none"> • Clarify how enrollment, admissions, and financial aid policies classify graduates of virtual schools, then communicate with students and families about the impact attending a virtual school has on eligibility and access.
Redesign high school to ensure students have access to flexible pathways to college and career.	<ul style="list-style-type: none"> • Evolve all districts to offer multiple pathways toward postsecondary credentials and degrees, including through industry certification programs, microcredentials, Tennessee Colleges of Applied Technology (TCATs), community colleges, four-year institutions, and other opportunities, with integration to allow students to move among pathways if one isn't a good fit, and evolve funding streams to mitigate disincentives for K-12 and postsecondary systems to enable flexibility for students. • Ensure every high school student has the opportunity to attend a TCAT or to substantively complete sufficient early postsecondary coursework toward an institution or industry credential while in high school. • Fully fund dual enrollment courses for high school juniors and seniors and expand dual enrollment courses to include qualified freshmen and sophomores. • Incentivize districts to support students in accessing a meaningful senior-year capstone experience such as an apprenticeship, a co-op, an internship, or another industry- or work-based learning (WBL) experience, including opportunities to earn both course credit and wages. • Move to an hours-per-year minimum to give districts flexibility over their calendars, with some guardrails to ensure districts maximize quality instructional time for students. • Expand opportunities for students to demonstrate proficiency at their own pace: <ul style="list-style-type: none"> ○ Create a high school equivalent to the College Level Examination Program (CLEP) test to allow students to show proficiency in subjects at the secondary level for the necessary credits while altering the Basic Education Program to eliminate disincentives for districts for early graduation. ○ Conduct research to identify challenges with the Move on When Ready Act and develop and implement a plan to strengthen it. ○ Leverage best practices from the Governor's Investment in Vocational Education (GIVE) Act to create scalable work-based learning and apprenticeship models statewide. • Pilot competency-based delivery models in high school to identify existing models and scalable best practices. • Incentivize the expansion of existing mentoring programs to support students in exploring and aligning their career goals and postsecondary pathways.
Streamline postsecondary systems to facilitate lifelong learning.	<ul style="list-style-type: none"> • Develop scalable, nonlinear credentialing pathways across TCAT, community college, and university pathways, including on- and off-ramps that are not fixed in a perceived order based on credential type. • Create an automatic dual admissions option for students entering two-year institutions that are partnering with four-year institutions to facilitate seamless transfer and degree alignment.

	<ul style="list-style-type: none"> • Conduct a full assessment and redesign of Tennessee Transfer Pathways, including clarification of which pathways transfer automatically between institutions without additional requirements or conditions (beyond earning a passing grade in coursework) and those that have additional requirements or conditions attached to transferability, and incentivize four-year institutions to partner with two-year institutions and TCATs in order to advance Transfer Pathways. • Expand the reach of TN Reconnect to accommodate additional alternative pathways and to reduce the eligibility gap between HOPE/TN Promise aid for traditional students and programs for independent adult learners. • Expand reverse articulation to include alternative credential pathways. • Incentivize students to take 15 credit hours per semester rather than 12 to improve on-time completion. • Pilot competency-based delivery models in higher education to identify existing models and scalable best practices. • Conduct a full assessment of the state's financial aid portfolio for alignment with best practices, consistency across programs, and alignment with other state goals and initiatives. • Create a state grant program to incentivize multistakeholder, multifocused initiatives and policies designed to address students' non-tuition-based needs, such as textbook and inclusive access fees, nontuition fees (auxiliary costs), and other success-inhibiting costs. • Create a pilot program at a set of community colleges to test the success of alternative scheduling, such as block scheduling or year-round scheduling, in meeting the needs of nontraditional students. • Develop a comprehensive advising/mentoring initiative not tied explicitly to subpopulations of financial aid recipients. • Task the Tennessee Higher Education Commission (THEC) with developing a workforce-responsive degree program and academic program approval policies at postsecondary institutions. • Incentivize postsecondary institutions to track the number of degrees leading to jobs in a related field.
Strengthen alignment across the K-12, postsecondary, and workforce systems.	<ul style="list-style-type: none"> • Improve access to and use of the existing P20 Data System, while protecting privacy. • Align incentives across K-12 and postsecondary public funding systems to encourage systems to collaborate, prioritize flexibility for students, maximize student success, and minimize the cost and time to degrees and industry certificates employers are seeking, and remove disincentives for school districts to support students in accelerating high school completion. • Incentivize the expansion of high-quality mentoring programs systemwide to support efforts related to student well-being, high school progression, and success in postsecondary.
Incentivize locally led innovation.	<ul style="list-style-type: none"> • Create an innovation hub at the state level to support local innovation, including rigorous evaluation and robust dissemination and scaling opportunities for successful strategies.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

Introduction

Since the release of the Commission's first report on December 24, 2020, Commissioners have undertaken considerable study of Tennessee's educational systems from kindergarten to career to identify areas of strength and opportunities for improvement. Over the course of the year, the Commission met seven times: February 12, 2021; March 8, 2021; May 14, 2021; July 7-8, 2021; August 16, 2021; September 2, 2021; and November 5, 2021. During these seven meetings, the Commission heard from a number of experts, leaders, and stakeholders, including:

- Ms. Demetrice Badru, Trousdale County Elementary School, Trousdale County Schools
- Mr. John Bailey, Vestigo Partners
- Dr. Jared Bigham, Tennessee Chamber of Commerce & Industry
- Dr. William Fox, University of Tennessee, Knoxville
- Ms. Cathy Ginel, Farragut Middle School, Knox County Schools
- Ms. Aleah Guthrie, SCORE
- Ms. Samantha Gutter, SCORE
- Mr. Brian Kelsey, state senator
- Ms. Julie Lammers, American Student Assistance
- Dr. Dale Lynch, TOSS
- Dr. Jeff McCord, Department of Labor and Workforce Development
- Ms. Carol Nanney, McKenzie High School, McKenzie Special School District
- Mr. Jack Powers, Tennessee Department of Education
- Dr. Michael Torrence, Motlow State Community College

The Commission also undertook considerable study of a range of different topics in K-12 education, postsecondary education, and career and workforce training, including:

- ACEs and trauma
- Alternative scheduling
- Charter schools
- Competency-based education
- Computer science policies
- Early literacy instruction
- Financial aid
- Financial incentives for teachers
- Improving linkages between K-12, postsecondary, and industry
- Individual learning plans
- Innovation
- Mental health and emotional well-being
- Mentoring
- Minimum school year requirements
- Non-tuition-based barriers in postsecondary
- Numeracy instruction
- Online learning
- Open enrollment policies
- School finance and incentives
- School-level autonomy
- Senior year redesign
- Student remediation
- Supports for nontraditional postsecondary students

- System coordination
- Teacher and leader workforce
- Technology infrastructure
- Transferability and stackability of postsecondary credentials

For each topic area, commissioners reviewed national best practices, examined research on student outcomes related to different policy approaches, evaluated Tennessee's existing policy landscape, and surfaced potential recommendations. Across the July, August, and September meetings, commissioners discussed and debated what they'd learned and, ultimately, aligned on a set of nine priorities and more than 60 recommendations for the General Assembly.

The priorities included in this report align closely with the four themes identified in the Commission's Year 1 report — learning loss, well-being, postsecondary and career preparedness, and technology gaps²⁰ — and are designed to address the two separate, but connected, charges outlined in the original legislation to (1) close educational gaps resulting from school closures and (2) modernize the state's educational structure from kindergarten to career in order to create more flexibility in the delivery of education to students.²¹

The nine priorities the Commission has identified for the General Assembly are:

- Ensure students master literacy and numeracy skills.
- Address learning remediation and acceleration needs.
- Strengthen, retain, expand, and diversify the state's education professionals.
- Equip schools and districts to address students' well-being.
- Optimize capacity for flexible, high-quality school options.
- Redesign high school to ensure students have access to flexible pathways to college and career.
- Streamline postsecondary systems to facilitate lifelong learning.
- Strengthen alignment across the K-12, postsecondary, and workforce systems.
- Incentivize locally led innovation.

The content included in this report is organized as follows: Section I includes a discussion of four priorities. These priorities address the actions required to close learning gaps exacerbated by the pandemic and other natural disasters that struck communities across Tennessee over the last two years. Section II includes a discussion of five priorities that focus on modernizing Tennessee's education system from kindergarten to career to meet the state's evolving economic and workforce needs.

The priorities and corresponding recommendations are organized thematically and are not in any particular order with regard to import or priority. Collectively, they are meant to serve as a path forward for legislators to reimagine the state's education systems over the next decade. Each of the nine priorities includes an overview of relevant research making a case for its importance, as well as a discussion of relevant Tennessee laws and policies. Each priority area includes a list of specific recommendations the Commission recommends the legislature take. Readers interested in learning more about the specific recommendations should refer to the separate appendix document.

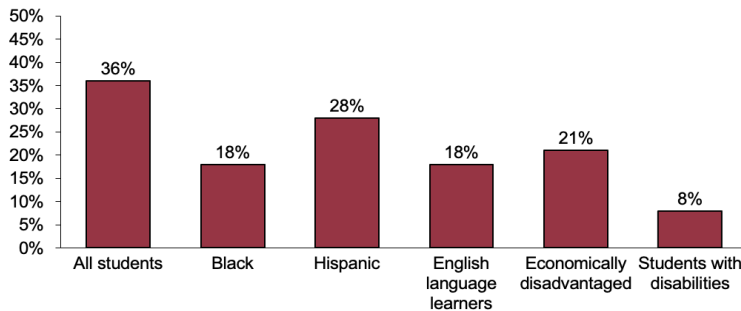
Section I: Close Educational Gaps Exacerbated by COVID-19

Tennessee Comprehensive Assessment Program (TCAP) data from the 2018-2019 school year — the year prior to the pandemic — show the state was already grappling with low proficiency rates and considerable gaps across subgroups of students before COVID-19 and natural disasters, with COVID-19 forcing the suspension of in-person schooling across the state. That year, across all grades and subjects, just 36% of students statewide met “On Track” or “Mastered” benchmarks, the two categories indicating students are meeting or exceeding grade-level expectations. Vulnerable groups of students fared even worse (see graph below).²²

Percent of Students Meeting or Exceeding Grade-Level Benchmarks

All subjects, all grade levels

School year 2018-2019



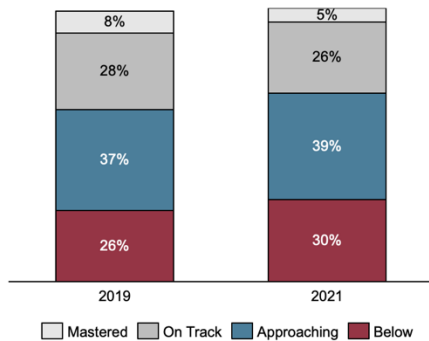
English language arts (ELA) and math scores followed a similar trend, with vulnerable subgroups of students scoring as proficient or higher at lower rates than statewide averages.²³

Two years later, after Tennessee’s 1 million K-12 students were out of school for weeks or months, the picture is much more dire. Just 31% of students across grade levels and subject areas reached the “On Track” or “Mastered” benchmarks, a drop of 5 percentage points. Fully 30% of students scored “Below” — the lowest achievement category, indicating they are performing well below grade-level expectations — an increase of 4 percentage points (see graph below). Across all vulnerable subgroups of students, fewer are scoring as proficient or higher, and more have fallen into the “Below” category.²⁴

Percent of Students in Each Proficiency Category

All subjects, all grade levels

School years 2018-2019 and 2020-2021



The legislature must act aggressively to address the longstanding educational challenges facing the state that were exacerbated by pandemic and the disruption to students’ learning in 2020

and 2021, with a particular emphasis on supporting vulnerable groups of students: Black students, Hispanic students, economically disadvantaged students, English language learners, and students with disabilities. To this end, the Commission has identified four priorities for the legislature to address.

Priority: Ensure students master literacy and numeracy skills.

Recommendations
Sub-priority: Literacy
<ul style="list-style-type: none">• Ensure recently enhanced and existing early literacy programs maintain financial viability, oversight, and accountability.• Establish rigorous and periodic evaluation of early literacy programs by independent evaluators (such as OREA), and make those results public.
Sub-priority: Numeracy
<ul style="list-style-type: none">• Create evidence-based professional development programs for teachers and leaders to improve math teaching and learning in order to respond to pandemic-related unmet learning, particularly for vulnerable populations.• Establish evidence-based curriculum recommendations for early numeracy.
Sub-priority: Funding
<ul style="list-style-type: none">• Fund Tennessee's K-12 system and focus funding in the classroom on literacy and math initiatives, ensuring, through rigorous external evaluation and public reporting, that those dollars are resulting in significantly improved student literacy and math achievement.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

The case for early literacy and math

The ability to read, write, and do math are core skills for educational success.²⁵ Students who are not proficient in reading by third grade are four times more likely to drop out of high school than students who meet the benchmark. In fact, 88% of students who failed to graduate high school were struggling readers in the third grade.²⁶

But early reading skills are not the only essential driver and predictor of educational success. Early numeracy skills are equally important in predicting later academic achievement.²⁷ Thankfully, there is a strong research base to support best practices for teaching both literacy and numeracy in the early grades,²⁸ and these practices can be incorporated into educator preparation programs and professional development opportunities for existing teachers.

The **Tennessee Department of Education (TDOE)** already has guidelines in place to support a cohesive program of study in both ELA and math in grades K-2, including focus standards for both subject areas.²⁹ In addition, the Tennessee Legislature recently passed a number of early literacy-related bills, designed to both improve literacy instruction and ensure students have access to research-based instructional materials:

- The **Tennessee Literacy Success Act**, passed in February 2021, requires **local education agencies (LEAs)** to provide foundational literacy skills instruction, including the development of a new universal reading screener.³⁰
- The **Learning Loss Remediation and Student Acceleration Act**, passed in January 2021, tightens Tennessee's previous third-grade retention law.³¹
- The Reading 360 initiative uses federal COVID-19 relief funding to provide grants and resources to support districts, teachers, and families to help more students develop phonics-based reading skills.³² (And as outlined in the state's ESSER fund plan,³³ a

Reading 360 research center will launch in 2022 to provide regular evaluation of early literacy programs.)

In contrast to the strong focus Tennessee has placed on early literacy, there is considerably less state investment and support for early numeracy. Tennessee's ESSER plan provides for a comprehensive set of math professional development for teachers, in particular for high school math and statistics.³⁴ These are important steps, and the state must continue to make ongoing investment in both early literacy and math skills if the legislature wishes to ensure all students, beginning at the earliest grades, are set on a path to academic success.

The recommendations listed at the beginning of this section will help ensure students master the foundational literacy and numeracy skills they need for success in school, work, and life.

Priority: Address learning remediation and acceleration needs.

Recommendations
<ul style="list-style-type: none">• Expand long-term funding for tutoring programs designed in alignment with research-supported best practices to address known gaps in literacy and math.
<ul style="list-style-type: none">• Expand access to, and continue in the long term (including by providing long-term state funding for), programs created by recent legislation (e.g., bridge camps, after-school learning mini-camps, and summer learning camps) that are demonstrating effectiveness at accelerating student learning.
<ul style="list-style-type: none">• Support early interventions and research-based materials and instruction for K-12 students to minimize the need for postsecondary remediation.
<ul style="list-style-type: none">• Create an early warning data system and corresponding interventions, ensuring integration across existing data systems and equal access and support (including funding) for implementation across districts.
<ul style="list-style-type: none">• Establish metrics to track and periodically report publicly on student remediation and acceleration and ensure those data are used to inform classroom practice.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

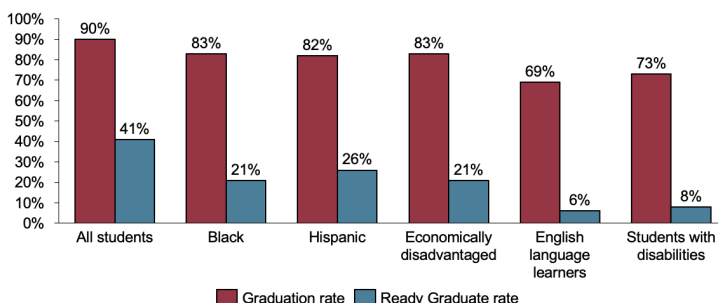
The case for addressing learning remediation and acceleration

Students do not always attain proficiency of grade-level subject matter before advancing to the next grade. This unfinished learning accumulates over time and results in students being behind grade-level expectations and in need of remediation to be able to succeed in postsecondary coursework.

Postsecondary remediation is expensive and often delays or derails students' workforce preparation. A 2016 study estimated remedial coursework cost students and their families nationally about \$1.3 billion annually for courses that will not count toward graduation.³⁵ Furthermore, remedial courses increase a student's time to degree attainment and decrease the likelihood a student will complete a program of study.³⁶

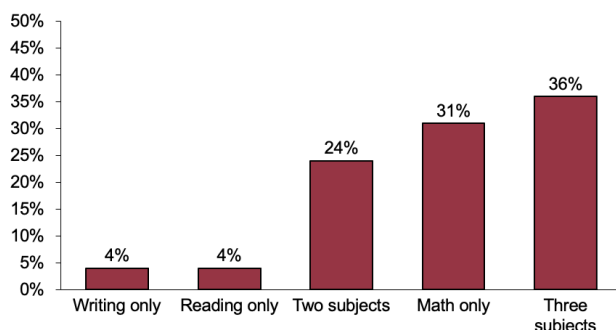
Tennessee has a high percentage of students requiring remediation. While 90% of Tennessee high school students graduate, only 41% meet Tennessee's "Ready Graduate" benchmarks indicating college readiness. These percentages are much lower for vulnerable student groups (see graphic below).

Graduation and Ready Graduate Rates, by Race and Subgroup Class of 2020



In fall 2019, 60% of first-time freshmen attending community colleges in Tennessee required remediation in reading, writing, and/or math, with more than one-third of students requiring remediation in all three subject areas (see graph below).³⁷

Percent of First-Time Freshman Requiring Learning Support, by Type of Support Fall 2019



Tennessee currently provides remediation or learning support through several programs and policies. As of 2015, Tennessee's four-year postsecondary institutions are no longer permitted to offer remedial courses.³⁸ Instead, they use a supplemental instructional model, in which students receive additional academic instruction (e.g., extended class time) while enrolled in a regular, credit-bearing college-level course. Community colleges offer corequisite remediation, through which students are enrolled in both a three-credit-hour college-level course and a three-credit-hour learning support course in the same subject at the same time. These changes enable students to engage in credit-bearing coursework simultaneously with remedial supports, mitigating the impact remediation has on their time to degree/credential.

In addition to these changes in postsecondary remediation structures, the state has implemented several programs to address students' remediation needs:

- In 2021, the legislature passed the Learning Loss Remediation and Student Acceleration Act, which created extended summer learning opportunities that gave students additional time to catch up on the learning they missed.³⁹ More than 120,000 students participated in summer 2021, and programming results show student gains in both ELA and math.⁴⁰
- In 2021, the legislature passed the Literacy Success Act, which includes the development of a universal reading screener designed to identify students early on who are in need of additional support, to ensure that third grade is not the first time reading

deficiencies are identified.⁴¹

- In 2012, the state implemented the **Seamless Alignment and Integrated Learning Support (SAILS)** program,⁴² which targets students who have not achieved college readiness benchmarks in math (meaning they achieved an 18 or less on the **ACT** math test) by introducing college remediation in the students' senior year of high school.
- Tennessee offers a free Summer Bridge program to incoming college freshmen.⁴³ During the three-week program, students attend a community college of their choice and receive instruction in math, reading, and English.
- Since 2012, Tennessee has received a federal **GEAR UP** grant to support, among other things, remediation efforts beginning in middle school.⁴⁴

It's important to note, however, that having effective remediation programs in place to catch students up is not sufficient. Instead, the state's goal should be to *reduce* the number of students requiring remediation at all. This requires intervention much earlier, in the K-12 system rather than in postsecondary or career, to ensure students learn what they need to learn at each grade level before progressing to the next.

The recommendations above will do both: address existing students' remediation needs and reduce the number of students requiring remediation.

Priority: Strengthen, retain, expand, and diversify the state’s education professionals.

Recommendations
<i>Sub-priority: Strengthen educator preparation and training opportunities.</i>
<ul style="list-style-type: none"> Strengthen the classroom-based clinical practice for all teacher candidates across all preparation pathways to include components of high-quality, research-based clinical experiences.
<ul style="list-style-type: none"> Strengthen the curriculum in educator preparation programs for both teachers and leaders to ensure they have the knowledge and skills to meet students’ diverse academic and well-being needs.
<ul style="list-style-type: none"> Create or expand high-quality, research-based, state-facilitated professional development opportunities to support teachers in using data to inform their instruction and meet the needs of individual students.
<ul style="list-style-type: none"> Increase educator compensation with the intent of elevating the profession and increasing competitiveness in Tennessee’s educator labor market.
<i>Sub-priority: Expand the educator pipeline.</i>
<ul style="list-style-type: none"> Expand and strengthen the existing Minority Teaching Fellows Program.
<ul style="list-style-type: none"> Provide technical assistance to districts, in particular rural districts, to establish partnerships with local educator preparation programs to create local Grow Your Own programs.
<ul style="list-style-type: none"> Create a strong evaluation plan for Grow Your Own programs to ensure these programs result in high-quality educators being placed in Tennessee’s classrooms.
<ul style="list-style-type: none"> Incentivize postsecondary institutions to work with their partner districts to cultivate new teacher pipeline programs.
<ul style="list-style-type: none"> Create new state-operated financial incentive programs for highly effective teachers and leaders.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

The case for excellent educators

Teachers matter more to student achievement than any other aspect of schooling,⁴⁵ impacting both academic achievement in reading and math⁴⁶ and students’ social, emotional, and behavioral development.⁴⁷ Effective school leaders, too, are critical levers for improving student achievement⁴⁸ and fostering whole-school improvement.⁴⁹ Simply put, investing in high-quality educators is fundamental to a strong foundation for Tennessee’s education system.

However, across the state, Tennessee’s district and school leaders are struggling with three, often related, challenges to staffing their schools with excellent educators:

- Teacher shortages in particular grade levels, subject areas, and geographies.
- A diversity gap between the teacher workforce and student population.
- Access to high-quality teachers.

Teacher shortages

Statewide, Tennessee schools have a teacher retention rate of 80%.⁵⁰ Urban districts and priority schools (those identified as the lowest-performing 5% of schools in the state based on proficiency rates) have lower retention rates than other types of districts and schools. District leaders report shortages in particular high-need content areas, including English as a second language and special education.⁵¹

Diversity gap

In addition, there is an ongoing shortage of teachers of color. Between 2013 and 2015, 12% of graduates from Tennessee's teacher preparation programs identified as people of color.⁵² This number increased slightly, to 14%, by 2020.⁵³ Meanwhile, more than one-third of Tennessee's students are students of color. A 2014 analysis by TDOE found 122 of the state's school districts had no Hispanic teachers and 27 had no Black teachers.⁵⁴

This mismatch is often referred to as a “diversity gap” — the gap existing between the largely white and monolingual teacher workforce and the increasingly racially, culturally, and linguistically diverse student population.⁵⁵ There is a growing research base demonstrating outcomes such as test scores, attendance, and suspension rates are affected by the demographic match between students and teachers,⁵⁶ and students of color exhibit positive social and academic outcomes when they have teachers with whom they identify.⁵⁷

The Tennessee State Board of Education recently adopted an educator diversity policy that requires school districts to create educator diversity goals and strategies to recruit diverse educators.⁵⁸

Quality gap

Lower-performing students benefit from access to a high-quality teacher.⁵⁹ However, analysis of Tennessee's teacher quality data shows those students are less likely to be in classrooms staffed with high-quality teachers, particularly in math.⁶⁰ A number of factors affect students' access to highly effective teachers, including a given district's supply of effective teachers, how teachers are assigned to schools within that district, and how teachers are staffed within a given school.⁶¹

The recommendations listed above will strengthen the current and future pool of education professionals to ensure all of Tennessee's students have access to excellent educators who can meet their unique learning needs and set them up for long-term success.

Priority: Equip schools and districts to address students' well-being.

Recommendations
<ul style="list-style-type: none">• Incentivize the expansion of existing, and the development of new, high-quality programs to support students' well-being.
<ul style="list-style-type: none">• Provide professional development to equip all staff to recognize students' well-being needs, especially ACEs, and know when and where to refer students for more support.
<ul style="list-style-type: none">• Fully fund school-based nurses, counselors, and social workers in line with Basic Education Program Review Committee 2021 recommendations.
<ul style="list-style-type: none">• Incentivize partnerships between education systems and existing mental and behavioral support systems to help educators and community members understand and leverage existing resources.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

The case for addressing students' well-being needs

Well-being, including mental, emotional, social, and behavioral health, plays a critical role in students' development and promotes positive results in school communities.⁶² Addressing students' well-being needs improves their social development, attitudes about school, conduct and behavior, emotional regulation, and academic performance.⁶³ Supporting student well-being also helps students develop the kinds of "nonacademic" skills that are increasingly valued by employers, such as decision-making,⁶⁴ self-awareness and relationship-building,⁶⁵ and self-control.⁶⁶

Many Tennessee schools already have programs and initiatives in place designed to support students' well-being, including **whole-child development**,⁶⁷ character development,⁶⁸ 21st-century skills,⁶⁹ workforce readiness,⁷⁰ **Positive Behavioral Interventions and Supports (PBIS)**,⁷¹ **Multi-Tiered System of Supports (MTSS)**,⁷² and positive climate and culture for schools and communities.⁷³

In addition, there have been a variety of state-led well-being initiatives in recent years, including the following:

- In 2015, TDOE created a toolkit to support educators in understanding and implementing social and personal competencies.⁷⁴
- Tennessee measures school climate through surveys assessing students' school experiences in three areas: (1) engagement, (2) safety, and (3) environment.⁷⁵
- As part of the state's Every Student Succeeds Act (ESSA) plan (required under federal law to define the state's approach to accountability and school supports), from 2015 to 2019 TDOE collaborated with Great Teachers & Leaders and the Appalachia Regional Comprehensive Center to develop modules designed to introduce social and personal learning and teaching practices that support the academic, social, and personal skills development of all students.⁷⁶
- In 2019, the TDOE's Division of Whole Child Supports, now the Division of Student and Family Supports, launched a trauma-informed schools initiative to help schools provide critical student supports.⁷⁷

- In 2020, the Tennessee Department of Mental Health and Substance Abuse Services expanded its School-Based Behavioral Health Liaison program to include all 95 counties in the state.⁷⁸
- Tennessee's ESSER plan, approved in July 2021, included \$17.8 million for mental health supports and Family Resource Centers.⁷⁹
- In March 2021, the Tennessee Department of Mental Health and Substance Abuse launched the Emotional Support Line for Pandemic Stress.⁸⁰
- The recently launched Mental Health Trust Fund will provide school-based mental health grants to increase capacity for district and school-based mental health providers for students, extend mental health initiatives and supports within the district, and expand existing trauma-informed schools work to a district-level approach.⁸¹

Though these steps move toward ensuring students have the well-being support they need to develop healthy social, emotional, mental, and behavioral skills, the work is far from done. Many schools and districts — particularly those in rural communities without a strong civic infrastructure — lack the resources and systems necessary to identify and address students' well-being needs.⁸² School disruptions and other COVID-19-related adverse events that have taken place over the last two years have greatly impacted students' well-being and exacerbated the need for school-level supports, and these effects are even more pronounced among vulnerable student groups.⁸³ In various forums throughout the pandemic, Tennessee's students have asked for greater empathy, counseling, and emotional support to help them deal with the effects of pandemic-related school closures.⁸⁴

The recommendations listed above will equip schools and school staff with the resources and knowledge to effectively address students' well-being needs.

Section II: Modernize Tennessee's Education System for the Future

The **Southern Regional Education Board (SREB)** recently projected 1.4 million workers in Tennessee are at risk for unemployment or reduced work hours due to economic impacts from the COVID-19 pandemic.⁸⁵ This is due largely to accelerated automation of many jobs, fueled by the pandemic. According to SREB projections, 30% of work activities could be automated by 2025.⁸⁶ The industries likely to be hardest hit are food preparation and serving, sales, production occupations, office and administrative occupations, and transportation and material moving. These fields employ large groups of workers most vulnerable to work disruption related to the pandemic and automation, including those with the lowest education levels, women, people of color, and workers who are both very young adults and older, more experienced workers (ages 16-23 and 56-74).⁸⁷

Even so, Tennessee's labor market is projected to net 356,000 jobs over the next decade.⁸⁸ (For example, Ford Motor Company's Blue Oval City project is projected to bring 5,800 jobs manufacturing electric vehicles to the Memphis area alone.⁸⁹) Of those 356,000 jobs, more than half (53%) will require workers with some education or training post-high school. Yet despite a rapidly shifting economy and job market, Tennessee's education system, particularly high school and beyond, remains very traditional. Most students pursue a traditional path through K-12 that translates to postsecondary readiness and success for very few.

Coordination across K-12 and postsecondary systems remains a challenge, hampering the ability of students to understand and navigate the opportunities available to them. Despite many efforts, including major investments in tuition-free community college and other supports, Tennessee's overall educational attainment remains insufficient to meet workforce demand. The legislature must take immediate and aggressive action to shape school options, and particularly high school and postsecondary systems, to meet both the needs of students at every stage and the needs of the evolving workforce in order to create opportunity for students to prepare for and participate in a thriving state economy. The legislature must create opportunities for individuals to gain new skills; develop multiple pathways to and through postsecondary education and training; and ensure learners of all ages and stages of life have access to learning opportunities.⁹⁰

The Commission has identified five priorities to modernize Tennessee's educational systems, kindergarten through career.

Priority: Optimize capacity for flexible, high-quality school options.

Recommendations
<i>Sub-priority: Ensure communities, schools, families, and students have technology, infrastructure, and devices.</i>
<ul style="list-style-type: none"> • Rigorously evaluate and hold current statewide internet infrastructure initiatives and future investments accountable to ensure goals and outcomes are met.
<ul style="list-style-type: none"> • Incentivize the coordination and innovation of universal broadband access.
<ul style="list-style-type: none"> • Require districts to maintain infrastructure, including devices, integrated technology platforms, and connectivity solutions, to seamlessly transition modes of instruction, and provide ongoing support and state funding.
<ul style="list-style-type: none"> • Require periodic virtual “drills” both to ensure schools, students, and families can move seamlessly between virtual and in-person delivery modes and to identify and address infrastructure-related challenges.
<i>Sub-priority: Ensure access to flexible, high-quality options regardless of setting.</i>
<ul style="list-style-type: none"> • Hold online schools receiving public funding accountable through existing school accountability structures.
<ul style="list-style-type: none"> • Enjoin educator preparation programs to incorporate best practices for multiple modes of delivery, including remote instruction, into their instruction and/or field experiences for all teachers.
<ul style="list-style-type: none"> • Provide ongoing professional development to K-12 educators to develop and strengthen remote instruction skills.
<ul style="list-style-type: none"> • Require that all curricula purchased by districts have an integrated technology-based capability and that districts establish and/or maintain the infrastructure and training required to fully leverage curricular resources across modes, allowing districts to seamlessly switch between delivery modes as necessary.
<ul style="list-style-type: none"> • Clarify how enrollment, admissions, and financial aid policies classify graduates of virtual schools, then communicate with students and families about the impact attending a virtual school has on eligibility and access.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

The case for optimizing technology to create flexible, high-quality school options

Maximizing opportunities for students to learn by harnessing technology requires the legislature to undertake three parallel efforts:

- Providing all Tennesseans with fast, reliable internet and devices .
- Preparing educational systems to be adaptive.
- Ensuring students and families have access to high-quality educational options.

Access to fast, reliable internet and devices

Tennessee has made some strides toward improving access, but there is still work to do. As of 2018, approximately 89% of households in Tennessee had a computer and 82% had internet

access — 43rd and 41st in the nation, respectively.⁹¹ The Tennessee Chamber of Commerce reported:⁹²

- 274,000 Tennesseans have no wired internet providers where they live.
- 492,000 Tennesseans do not have wired internet access capable of 25Mbps download speeds — the minimum requirement for most online learning.
- 56% of teachers reported barriers preventing students from accessing remote learning during the pandemic.
- Rural Tennessee is most impacted by the lack of broadband access — in 19 districts across the state, more than 75% of responding teachers identified better internet access for students as a major need to support online learning.

Although Tennessee lags behind many states in broadband coverage, it has led the nation in innovative approaches to the problem. In 2010, for example, Chattanooga-based electric power company EBP became the first electric company in the country to build a communitywide fiber optic network,⁹³ and in 2015, EBP began offering the world's first 10 gigabit communitywide internet service.⁹⁴ A growing number of electric co-ops in Tennessee are following EBP's lead. These co-ops aim to close the digital divide by investing more than \$1.2 billion to expand connectivity into rural and suburban communities. To date, 13 of 23 co-ops have active broadband projects and have invested a combined \$187 million.⁹⁵

In addition, Tennessee has a number of other funding opportunities and initiatives in place through the Department of Economic and Community Development to increase broadband access.⁹⁶ In 2020, Tennessee received nearly \$149 million to expand access to broadband in the state's rural communities.⁹⁷ These funds are in addition to the \$61 million in federal COVID-19 relief funds Governor Lee allocated toward broadband expansion⁹⁸ and \$27 million in grants for broadband providers in Tennessee provided by the U.S. Department of Agriculture.⁹⁹ In the midst of the pandemic, the TDOE took a number of steps to address technology gaps inhibiting students' ability to learn online: In August 2020, the TDOE announced \$15 million in matching grants to help school districts provide **MiFi** devices and data coverage for 100,000 students who lacked internet access at home.¹⁰⁰ In early 2021, the TDOE entered a five-year partnership with T-Mobile to provide school districts across the state with access to student connectivity devices and mobile Wi-Fi hotspots, which the districts could then provide to families at no cost.¹⁰¹

There are clearly efforts underway to improve Tennesseans' access to fast, reliable internet, and a critical step in fully closing the digital divide is ensuring the state benefits from all of these efforts through evaluation and accountability to achieve intended outcomes.

Preparing educational systems to be adaptive

The second effort policymakers must undertake is to prepare schools and systems to deliver instruction in a variety of modes.

Preparing education systems to be adaptive requires developing and maintaining both human capital (people) and infrastructure. Most educator preparation programs do not prepare candidates to deliver instruction virtually despite the fact that it is a very different environment requiring a different set of skills. Even the best teacher's in-person skills do not necessarily translate online, and online teaching success requires expanding educators' skillsets.¹⁰² As the COVID-19 pandemic has shown, even teachers who hold positions in traditional brick-and-mortar schools teaching in person may end up having to teach online at some point in their careers. Research has established guidance and best practices for online instruction.¹⁰³ All of Tennessee's teachers must be equipped with the skills and strategies for teaching in a variety of

settings to facilitate ongoing education in the event of future shifts to online learning and to enable a range of high-quality educational options to families and students.

In addition to ensuring educators are equipped to move seamlessly between online and in-person instruction, “pandemic proofing” education systems for the future requires ensuring schools have the infrastructure they need to enable smooth transitions.¹⁰⁴ The content, curricula, and resources schools adopt and use must also be transferable between modes of instruction.

Ensuring quality options

Finally, the legislature must take steps to ensure students and families can access quality options that meet their needs and set students up for success. Fully online schools (also called “virtual schools”) are largely low quality. Research consistently demonstrates students who attend virtual schools do not perform as well as their peers attending traditional brick-and-mortar schools.¹⁰⁵ These trends hold true across racial and ethnic subgroups, for students from different socioeconomic backgrounds, and when accounting for prior achievement,¹⁰⁶ suggesting there is substantial room for improvement in how these schools are operated and held accountable for student performance.

Tennessee’s **Virtual Public Schools Act** governs online schools in the state.¹⁰⁷ It requires virtual schools to:

- Be created and overseen by a local education agency.
- Provide curriculum aligned to state standards.
- Offer the same length of learning time per academic year as brick-and-mortar public schools.
- Regularly assess students in ELA, math, science, and social studies.
- Ensure families have access to necessary materials and technology, including a computer, printer, and internet connection through, at a minimum, a physical computer lab that is available to the student at regularly scheduled times.
- Hire teachers who are qualified to teach under existing state laws governing teacher requirements, with no additional or different qualifications.
- Limit enrollment to 1,500 students; however, public virtual schools demonstrating student achievement growth at a minimum level of “at expectations” on **Tennessee Value-Added Assessment System (TVAAS)** may exceed this enrollment cap.

The legislation also requires virtual schools to be evaluated annually based on:

- The extent to which the school demonstrates increases in student achievement.
- The accountability and viability of the virtual school, as demonstrated by its academic, fiscal, and operational performance.

Virtual schools identified for interventions may be subject to the same interventions outlined in law for brick-and-mortar schools. In addition, if a virtual school is identified as a priority school or demonstrates growth “significantly below expectations” for three consecutive years, the commissioner has the authority to reinstate the enrollment cap or direct the district to close the school.¹⁰⁸

The recommendations listed at the beginning of this section address all aspects of flexible, high-quality school options by expanding access to broadband, enhancing the adaptability of schools, and strengthening the accountability and oversight for virtual educational options.

Priority: Redesign high school to ensure students have access to flexible pathways to college and career.

Recommendations
<ul style="list-style-type: none"> • Evolve all districts to offer multiple pathways toward postsecondary credentials and degrees, including through industry certification programs, microcredentials, TCATs, community colleges, four-year institutions, and other opportunities, with integration to allow students to move among pathways if one isn't a good fit, and evolve funding streams to mitigate disincentives for K-12 and postsecondary systems to enable flexibility for students.
<ul style="list-style-type: none"> • Ensure every high school student has the opportunity to attend a TCAT or to substantively complete sufficient early postsecondary coursework toward an institution or industry credential while in high school.
<ul style="list-style-type: none"> • Fully fund dual enrollment courses for high school juniors and seniors and expand dual enrollment courses to include qualified freshmen and sophomores.
<ul style="list-style-type: none"> • Incentivize districts to support students in accessing a meaningful senior-year capstone experience such as an apprenticeship, a co-op, an internship, or another industry- or work-based learning experience, including opportunities to earn both course credit and wages.
<ul style="list-style-type: none"> • Move to an hours-per-year minimum to give districts flexibility over their calendars, with some guardrails to ensure districts maximize quality instructional time for students.
<ul style="list-style-type: none"> • Expand opportunities for students to demonstrate proficiency at their own pace: <ul style="list-style-type: none"> ○ Create a high school equivalent to the College Level Examination Program (CLEP) test to allow students to show proficiency in subjects at the secondary level for the necessary credits while altering the Basic Education Program to eliminate disincentives for districts for early graduation. ○ Conduct research to identify challenges with the Move on When Ready Act and develop and implement a plan to strengthen it. ○ Leverage best practices from the Governor's Investment in Vocational Education (GIVE) Act to create scalable work-based learning and apprenticeship models statewide.
<ul style="list-style-type: none"> • Pilot competency-based delivery models in high school to identify existing models and scalable best practices.
<ul style="list-style-type: none"> • Incentivize the expansion of existing mentoring programs to support students in exploring and aligning their career goals and postsecondary pathways.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

The case for redesigning high school

To make high school meaningful and valuable for Tennessee students and to ensure it puts all students on a path to long-term success — whatever that may look like — it is imperative that the legislature redesign the high school experience. Fundamentally, this means “replacing the existing norm, the one that prioritizes order, compliance, and standardizations [with one that

prioritizes] dynamic, experiential learning that is relevant to individual student interests and needs.”¹⁰⁹ Creating multiple pathways for students, allowing students to progress through high school more quickly than traditional pathways allow, establishing strong connections between postsecondary institutions and industry, and ensuring students have multiple settings in which to learn are all core elements of a successful high school redesign.¹¹⁰ In short, high school must reflect both the rigor and the relevance required to prepare students for postsecondary success, both in education and in career.

Tennessee has a variety of programs and policies in place to support aspects of high school redesign. To help connect high schools with postsecondary institutions and industry, the state designed **Tennessee Pathways**, the K-12 initiative under Tennessee’s **Drive to 55** initiative. This partnership between the Tennessee Department of Education and the Tennessee Board of Regents is structured around three key elements to support alignment, enrollment, and success in postsecondary programs: (1) high-quality college and career advising throughout K-12, (2) early college and career experiences, and (3) cross-sector partnerships.¹¹¹

Tennessee has implemented strong work-based learning policies to support high school students in gaining on-the-job training and facilitate connections between K-12 schools and industry.¹¹²

For students who want to move at their own pace and begin earning college credits, the state offers two main pathways. The first is a set of early postsecondary opportunities, which include programs such as dual enrollment, dual credit, and **Advanced Placement (AP)** and **International Baccalaureate (IB)**. (Statewide, 81% of districts participate in the state’s AP Access for All initiative,¹¹³ which allows students in participating districts to access free, online AP courses.) All of these programs provide students with the ability to earn postsecondary credits while they are in high school.¹¹⁴ Second, the Move on When Ready Act, enacted in 2011, allows students to graduate from high school early, provided they meet certain requirements.¹¹⁵

The Innovative High School Models grant, administered by TDOE, encourages strong, strategic, and innovative partnerships among school districts, postsecondary institutions, and local employers to reimagine how to prepare students for success after high school. Twenty-one school districts have been awarded \$30 million in grants under this program.¹¹⁶

Many of these programs are underleveraged, and high schools in Tennessee continue to be remarkably traditional. A majority of students progress through their high school careers in a uniform fashion and finish unprepared for the continuing postsecondary training increasingly required by employers. More must be done to ensure every student’s high school experience reflects the rigor and relevance required to set them up for life after high school, regardless of the path they choose.

The recommendations outlined above will help the legislature restructure high school to better meet the needs of Tennessee’s current and future students.

Priority: Streamline postsecondary systems to facilitate lifelong learning.

Recommendations
<i>Sub-priority: Enable seamless movement among institutions, regardless of type.</i>
<ul style="list-style-type: none"> Develop scalable, nonlinear credentialing pathways across TCAT, community college, and university pathways, including on- and off-ramps that are not fixed in a perceived order based on credential type.
<ul style="list-style-type: none"> Create an automatic dual admissions option for students entering two-year institutions that are partnering with four-year institutions to facilitate seamless transfer and degree alignment.
<ul style="list-style-type: none"> Conduct a full assessment and redesign of Tennessee Transfer Pathways, including clarification of which pathways transfer automatically between institutions without additional requirements or conditions (beyond earning a passing grade in coursework) and those that have additional requirements or conditions attached to transferability, and incentivize four-year institutions to partner with two-year institutions and TCATs in order to advance Transfer Pathways.
<ul style="list-style-type: none"> Expand the reach of TN Reconnect to accommodate additional alternative pathways and to reduce the eligibility gap between HOPE/TN Promise aid for traditional students and programs for independent adult learners.
<ul style="list-style-type: none"> Expand reverse articulation to include alternative credential pathways.
<ul style="list-style-type: none"> Incentivize students to take 15 credit hours per semester rather than 12 to improve on-time completion.
<ul style="list-style-type: none"> Pilot competency-based delivery models in higher education to identify existing models and scalable best practices.
<ul style="list-style-type: none"> Conduct a full assessment of the state's financial aid portfolio for alignment with best practices, consistency across programs, and alignment with other state goals and initiatives.
<i>Sub-priority: Support postsecondary students' nonacademic needs.</i>
<ul style="list-style-type: none"> Create a state grant program to incentivize multistakeholder, multifocused initiatives and policies designed to address students' non-tuition-based needs, such as textbook and inclusive access fees, nontuition fees (auxiliary costs), and other success-inhibiting costs.
<ul style="list-style-type: none"> Create a pilot program at a set of community colleges to test the success of alternative scheduling, such as block scheduling or year-round scheduling, in meeting the needs of nontraditional students.
<ul style="list-style-type: none"> Develop a comprehensive advising/mentoring initiative not tied explicitly to subpopulations of financial aid recipients.
<i>Sub-priority: Develop workforce-responsive degrees and outcomes measures.</i>
<ul style="list-style-type: none"> Task the Tennessee Higher Education Commission (THEC) with developing a workforce-responsive degree program and academic program approval policies at postsecondary institutions.
<ul style="list-style-type: none"> Incentivize postsecondary institutions to track the number of degrees leading to jobs in a related field.

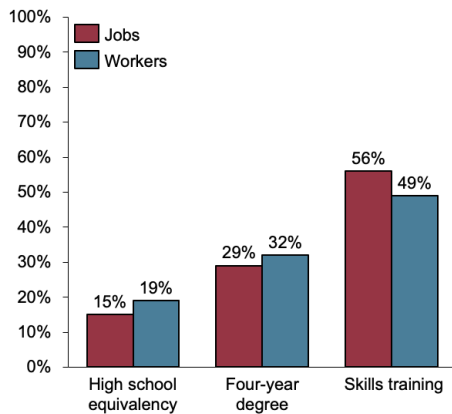
Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

The case for restructuring postsecondary systems with a focus on lifelong learning

Tennessee is grappling with a shortage of skilled workers. As of 2018, approximately 56% of Tennessee's jobs require some skills training beyond high school, and 29% require a four-year degree.¹¹⁷ And while 32% of Tennessee's workers hold a four-year degree, just 49% hold the kind of skills necessary to fill gaps in the state's economy (see graph below).¹¹⁸ Moreover, 13 of the top 15 high-demand occupations by projected growth require education beyond high school,¹¹⁹ and enrollment is flat for many of the state's training programs for these occupations.¹²⁰

Tennessee's Jobs and Workers by Education Level

2018



To fill these gaps, Tennessee must invest in creating lifelong learning opportunities that allow learners of all ages to enter or return to school to gain the knowledge and skills necessary to progress in their careers, fill gaps in the workforce, and gain new skills as the state's economy evolves. This will require redesigning elements of the state's postsecondary systems to better accommodate and meet the needs of nontraditional students — those who are over the age of 24 and often have a variety of family and work responsibilities as well as other life circumstances that can interfere with successful degree completion.¹²¹ Nationwide, nontraditional students make up about 40% of the undergraduate population.¹²² These students are more likely to enroll in two-year, public institutions, attend part-time, and leave without a degree.¹²³

The success of adult and nontraditional learners will be critical to the future of Tennessee's workforce and economy.¹²⁴ To support these students, the state has already implemented a number of programs and policies, including:

- The HOPE Scholarship for nontraditional students, which provides funding to entering freshmen or students who have not been enrolled in any college for at least two years from the date of last enrollment in college.¹²⁵
- The Tennessee Reconnect Grant, which is a **last-dollar** grant that pays the remaining balance of tuition and mandatory fees after other state and federal financial aid have been applied.¹²⁶
- The Timewise TN program, which provides students with the opportunity to earn credit for prior learning.¹²⁷

The recommendations outlined above will help ensure learners of all ages have access to the training, credential, and degree opportunities they need to be successful across their lifetimes and in a variety of settings.

Priority: Strengthen alignment across the K-12, postsecondary, and workforce systems.

Recommendations
<ul style="list-style-type: none">● Improve access to and use of the existing P20 Data System, while protecting privacy.
<ul style="list-style-type: none">● Align incentives across K-12 and postsecondary public funding systems to encourage systems to collaborate, prioritize flexibility for students, maximize student success, and minimize the cost and time to degrees and industry certificates employers are seeking, and remove disincentives for school districts to support students in accelerating high school completion.
<ul style="list-style-type: none">● Incentivize the expansion of high-quality mentoring programs systemwide to support efforts related to student well-being, high school progression, and success in postsecondary.

Note: See the glossary at the end of this document for a definition of key terms and the separate appendix document for more detail on these recommendations.

The case for systems alignment

Education policy reforms are strongest when they are aligned with other statewide reform efforts and are connected to other agencies, departments, and systems.¹²⁸ This is particularly true of college- and career-ready initiatives, which require integration and alignment of priorities and initiatives across three, often distinct, systems: K-12, postsecondary, and the workforce.

As described above, Tennessee has taken great strides over recent years to develop programs and policies that work to align these systems. For example:

- Tennessee Pathways, a partnership between the TDOE and the Tennessee Board of Regents, supports alignment, enrollment, and success in postsecondary programs.¹²⁹
- The state's work-based learning policies support high school students in accessing a variety of work-based learning opportunities (e.g., internships, cooperative programs, pre-apprenticeships) that help prepare them for future careers.¹³⁰
- Early postsecondary opportunities such as dual enrollment, dual credit, and AP/IB programs provide high school students with the ability to earn postsecondary credits.¹³¹
- The Move on When Ready Act, enacted in 2011, allows students to graduate from high school early, provided they meet certain requirements.¹³²

However, systems and incentives remain misaligned, causing complexity for students and creating barriers to their success. The recommendations outlined above can help the legislature strengthen alignment across the K-12, postsecondary, and workforce systems in Tennessee.

Priority: Incentivize locally led innovation.

Recommendations
<ul style="list-style-type: none">• Create an innovation hub at the state level to support local innovation, including rigorous evaluation and robust dissemination and scaling opportunities for successful strategies.

Note: See the separate appendix document for more detail on this recommendation.

The case for innovation

Though “innovation” is a frequently used term in education, it lacks a clear or consistent definition. The New Schools Venture Fund, an organization that invests in education entrepreneurs, defines a “successful innovation” as a new approach that brings an improved result.¹³³

Innovation has been happening in small pockets across the country for decades, as local educators find new ways to address the challenges their students, schools, and communities face. Some schools and districts have hired chief innovation officers with varying responsibilities ranging from strategic planning to technology integration to implementing school choice initiatives.¹³⁴ States have created “innovation funds” or other programs to spur and support local innovation. The Virginia Department of Education, for example, operates the K-12 School Innovation Planning Grant,¹³⁵ which provides competitive planning grants to school districts or consortia of districts to develop school-level innovations. Since 2016, the Minnesota State Educational Innovations Unit has hosted Shark Tank Open, awarding grants of up to \$25,000 to faculty and staff around the state to implement their innovative ideas.¹³⁶

In Tennessee, TDOE has implemented several grant opportunities aimed at spurring innovation, including the \$1 million **Individuals with Disabilities Education Act (IDEA)** Innovation Grant, which supported local school districts in addressing the needs of students with disabilities,¹³⁷ and \$642,000 in grant funding to support innovation in teacher preparation and development.¹³⁸

These kinds of programs can be powerful levers for spurring innovation in schools and districts. But creating an education *system* that prioritizes innovation, supports research and development, and gives educators the space to innovate within their schools and classrooms requires processes that make opportunities for innovation accessible to everyone¹³⁹ and that align incentives, tools, and investments to sustain cycles of learning over time.¹⁴⁰

The recommendation identified above can help the state incubate and scale local innovation in Tennessee.

Conclusion and Next Steps

This report has described a variety of challenges facing students across Tennessee, from kindergarten to career, including:

- Poor academic outcomes in reading, math, and college-readiness.
- Persistent gaps in K-12 and postsecondary outcomes among student subgroups, in particular for vulnerable populations (e.g., Black students, Hispanic students, economically disadvantaged students, students with special needs, and students learning English).
- A need for more robust well-being supports for students of all ages.
- A need for improved broadband and device infrastructure to facilitate access to educational options.
- Rigid structures that make it challenging to progress through K-12 and postsecondary at an individualized pace.
- A lack of efficiency and coordination among systems, making it difficult for students to access additional education, training, and skills development at various stages in their lives and careers.

The Commission identified nine priorities for the General Assembly to address these challenges:

- Ensure students master literacy and numeracy skills.
- Address learning remediation and acceleration needs.
- Strengthen, retain, expand, and diversify the state's education professionals.
- Equip schools and districts to address students' well-being.
- Optimize capacity for flexible, high-quality school options.
- Redesign high school to ensure students have access to flexible pathways to college and career.
- Streamline postsecondary systems to facilitate lifelong learning.
- Strengthen alignment across the K-12, postsecondary, and workforce systems.
- Incentivize locally led innovation.

These priorities and their corresponding recommendations offer the General Assembly a path to:

1. Address the learning needs that have existed for years and were exacerbated by recent pandemic- and natural disaster-related disruptions to schooling.
2. Modernize Tennessee's education system to be more flexible, adaptable, and resilient as the needs of the state's people and economy change.

As the state of Tennessee begins to move out of a recovery mindset and toward a "new normal," state leaders and policymakers must not overlook the challenges exacerbated by the pandemic and natural disasters over the last two years. Nor can they focus solely on addressing those gaps; they must simultaneously reimagine the state's education systems to create more flexible, adaptable pathways that can change as the needs of the state and its citizens change.

Over the coming months the Commission will continue to learn, engage with stakeholders, including educators and students, and refine these recommendations. Final revisions will be captured in the next and final report, due to the General Assembly by June 30, 2022.

Acknowledgments

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Glossary of Terms and Acronyms

Term	Acronym	Definition
Accelerated Study in Associate Programs	ASAP	City University of New York initiative aimed at increasing graduation rates at colleges. ASAP features two types of alternative scheduling: block and year-round.
Advanced Placement	AP	A College Board program that provides high school students with the opportunity to take college-level courses and earn college credit with qualifying exam scores.
Adverse childhood experiences	ACE	ACEs are potentially traumatic events that occur in a child's life. Examples of ACEs can include experiencing violence, abuse, or neglect, witnessing violence in the home or community, or having a family member attempt or die by suicide. A child's environment can also be an example of an ACE, such as growing up in a home with substance abuse or mental health problems or experiencing parental separation or household members being incarcerated.
American College Testing	ACT	The ACT is a standardized test used for college admissions in the United States.
Articulation agreement		Agreement made between two or more institutions that guarantees that courses completed at one school will be accepted when a student transfers to another school; these agreements are important to support clear credential and degree requirements and pathways and to ensure that students will not "waste" time repeating a course.
Basic Education Program	BEP	The funding formula through which state and corresponding local education dollars are generated and distributed to schools in Tennessee.
Clinical practice/student teaching		10 weeks or more of supervised, full-day experience in a classroom with a highly effective mentor teacher. The teacher and others provide observation and feedback for the teaching candidate engaged in the clinical experience.
College Level Examination Program	CLEP	A group of standardized tests created and administered by the College Board that assess college-level knowledge in 36 subject areas, allowing students to earn college credits without taking college courses.
Competency-based education	CBE	A framework for teaching and assessment of learning that allows students to advance based on demonstrated mastery of individual skills or competencies when ready, in contrast with a traditional model in which students move as a grade-level group or cohort through the same material at the same pace. A "skill" or "competency" would be

		something like “dividing fractions.” Once a student demonstrates mastery of a skill or competency, they move on to the next skill.
Complete College Tennessee Act	CCTA	This act changes Tennessee’s higher education funding formula to an outcomes-based model that rewards productivity as measured by rates of degree completion, creates a statewide transfer policy between two-year community colleges and four-year universities, and requires the Tennessee Board of Regents and the University of Tennessee systems to establish dual admission and dual enrollment policies.
Credential stacking		A sequence of credentials that accumulate over time, allowing an individual to move along a career pathway or up a career ladder.
Drive to 55		Tennessee’s statewide postsecondary credential attainment goal, which aims to increase the number of Tennesseans with a postsecondary credential to 55% by the year 2025.
Early postsecondary opportunities	EPSO	Learning opportunities where students can earn postsecondary credit or credentials while in high school (e.g., dual/concurrent enrollment programs, AP courses, industry-recognized certificates).
Early warning data system	EWDS	A system that tracks student progress over time on a variety of metrics and can help ensure students in need of additional support are identified early and provided the resources they need to be successful.
English language arts	ELA	Reading, writing, and comprehension of the English language.
Every Student Succeeds Act	ESSA	The most recent and current iteration of the Elementary and Secondary Education Act of 1965 passed in 2015, which governs K-12 public education policy in the United States.
Evidence-based (or research-based)		An approach to education (and other fields) that emphasizes the application of the findings from the best available current research. Practices and procedures are then based on what the evidence supports as best.
Financial Aid Simplification for Tennesseans Act	FAST Act	The act affects over a dozen financial aid programs, adds to the powers of the THEC, and clarifies the purpose and structure of the Tennessee Student Assistance Corporation (TSAC), among other minor changes.

Gaining Early Awareness and Readiness for Undergraduate Programs	GEAR UP	A federal grant program for states and partnerships to increase the number of low-income students matriculating into in-state public universities.
Governor's Investment in Vocational Education Act	GIVE Act	Designed to foster long-term regional partnerships between TCATs, community colleges, industry, economic development/workforce agencies, and K-12 to identify and address skills gaps in the local workforce.
Grow Your Own	GYO	Teacher preparation strategy focused on developing and retaining teachers from a school's or district's local community.
Integrated technology		The use of technology resources (e.g., computers, smartphones, tablets, digital cameras, social media, software applications) in daily classroom practices and in the management of a school.
International Baccalaureate	IB	An international education program and curriculum made up of three core elements and six subject groups. Students who successfully complete the program can earn advanced standing, course credit, scholarships, and other admissions-related benefits at many universities.
Last dollar		Last-dollar programs cover the educational costs left after all other public funding or grants have been awarded and usually apply only to tuition and mandatory fees (but not books, meal plans, housing, or other expenses).
Learning acceleration		A learning strategy where teachers deliver grade-level instruction to students while providing supports or scaffolds as needed.
Local education agency	LEA	A public board of education or other public authority within a state that maintains administrative control of public elementary or secondary schools in a city, county, township, school district, or other political subdivision of a state. School districts and county offices of education are both LEAs.
MiFi		A portable wireless device that connects to a mobile phone network to create a mini broadband hot spot.
Multi-Tiered System of Supports	MTSS	A framework that helps educators provide academic and behavioral strategies for students with various needs. MTSS grew out of the integration of two other intervention-based frameworks: Response to Intervention (RtI) and PBIS.

National Council of Teachers of Mathematics	NCTM	Founded in 1920, the NCTM is the world's leading mathematics education organization and advocates for high-quality mathematics teaching and learning for each and every student.
National Research Council	NRC	The NRC is the operating arm of the United States National Academies of Sciences, Engineering, and Medicine and is overseen by a governing board that consists of councilors from each of the three academies. The national academies are private, nonprofit institutions that provide expert advice on challenges facing the nation and world.
Nontraditional students		Broadly defined term encompassing all students who do not fall into the traditional pattern of entering postsecondary education full time the fall after their high school graduation. Nontraditional students can be those who enroll one or more years post-high school, those who attend part time, those with dependent children or who provide care for relatives, those working full time, those with an alternative high school completion certificate, those returning to college after a gap of several years, or those beginning college at age 25 or older.
Office of Research and Education Accountability	OREA	Tennessee office that provides the TN General Assembly with objective and accurate research, evaluation, and analysis.
Outcomes-based funding model	OBF	A financing strategy that allocates a portion of education funding based on schools' achievement on specific student outcomes.
P20		P20 refers to preschool through higher education (up to 20 years of schooling).
P20 Connect TN Data System		System that provides a full view of students across various data points and multiple systems, including K-12, higher education, and workforce development.
Positive Behavioral Interventions and Supports	PBIS	PBIS is an evidence-based, three-tiered framework to improve and integrate all of the data, systems, and practices affecting student outcomes every day.
Ready Graduate		An indicator of college and career readiness for Tennessee high school graduates. A Ready Graduate must meet one of the following four criteria: (1) score benchmark on the ACT or SAT; (2) complete four EPSOs; (3) complete two EPSOs and earn an industry credential; or (4) complete two EPSOs and earn demonstrate military readiness.

Remediation		Remediating or reteaching (teaching again) material that students did not adequately learn at their previous education level.
Reverse articulation		Currently, Tennessee has a Reverse Transfer Program for students transferring from a community college to a four-year institution. They typically have many of the credits required for an associate's degree. Reverse articulation allows them to apply new credits earned at the four-year institution to previous credits earned to receive an associate's degree. Should the student not achieve a bachelor's degree, they will at least hold a degree representative of the work they completed.
Seamless Alignment and Integrated Learning Support	SAILS	SAILS targets students that have not achieved college readiness benchmarks by introducing the college developmental curriculum into high schools' senior year. Developed by K-12 teachers and faculty at Chattanooga State Community College, SAILS embeds the TBR Learning Support competencies into high schools' senior-year math courses, utilizing a blended-learning model.
Southern Regional Education Board	SREB	The SREB works with states to improve public education at every level, from early childhood through doctoral education. They are a nonpartisan, nonprofit organization working with institutions, educators, and policymakers.
Supplemental Nutrition Assistance Program	SNAP	SNAP provides nutrition benefits to supplement the food budget of needy families so they can purchase healthy food and move toward self-sufficiency. Eligibility is determined by state-specific requirements, including resource and income limits.
Temporary Assistance for Needy Families	TANF	The TANF program, which is time-limited, assists families with children when the parents or other relatives cannot provide for the family's basic needs. The Federal government provides grants to states to run the TANF program.
Tennessee Accelerating Literacy and Learning Corps	TN ALL Corps	Tutoring model that will span 2020-2023 and will provide tutor training and certification, grade-level specific content, high-dosage tutoring, significant guidance and tutoring resources, and a directory of TDOE-reviewed providers.
Tennessee Board of Regents	TBR	The TBR establishes, governs, manages, and controls the state university and community college system of Tennessee. It is governed by 19 board members and meets, at a minimum, quarterly.

Tennessee College of Applied Technology	TCAT	Tennessee has 27 TCATs. They are the state's premier providers of state-of-the-art technical training for workers to obtain the technical skills and professional training necessary for advancement in today's competitive job market.
Tennessee Comprehensive Assessment Program	TCAP	TCAP has been the state's testing program since 1988, and it includes TNReady assessments in math, English language arts, social studies, and science, as well as alternative assessments, like the Multi-State Alternate Assessment (MSAA) and TCAP-Alt, for students with special needs.
Tennessee Department of Education	TDOE	Tennessee enrolls approximately 998,000 students and is divided into 147 districts with both significant urban and rural populations. These students are overseen by the TDOE, which is dedicated to the goal of dramatically improving student achievement and committed to the belief that children from all backgrounds can succeed when given the opportunities they deserve.
Tennessee Higher Education Commission	THEC	Formed in 1967, the THEC is the state's higher education coordinating board and is responsible for an array of duties, including administration of outcomes-based funding formulas, approval of new degree programs, development of a higher-ed state master plan, providing postsecondary data analysis, and more.
Tennessee Pathways		A set of programs and initiatives designed to create alignment between K-12, postsecondary education, and employers so that students have a clear and guided pathway to gain the knowledge and experience needed to move seamlessly into the workforce.
Tennessee Transfer Pathways		A program allowing students to complete a two-year program at a community college and apply those credits toward a four-year degree program at a college/university.
Tennessee Value-Added Assessment System	TVAAS	TVAAS measures student growth year over year, regardless of whether the student is proficient on the state assessment. In calculating a TVAAS score, a student's performance is compared to the performance of his or her peers who have performed similarly on past assessments.
TN Reconnect		A program that supports adult learners pursuing a postsecondary degree.

Virtual drills		Virtual drills are scheduled practice sessions on delivering and receiving virtual/online instruction. The purpose of these drills is to ensure that future disruptions to public education will be met by students, families, and teachers prepared to “go virtual” and continue teaching and learning until in-person education can resume.
Whole-child development		A focus on all aspects of a child’s well-being, including social-emotional, physical, creative, and cognitive capacities.
Work-based learning	WBL	An educational strategy that offers learners an opportunity to reinforce and deepen their classroom learning, explore future career fields, and demonstrate their skills in an authentic, real-world setting such as an internship or apprenticeship.

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