

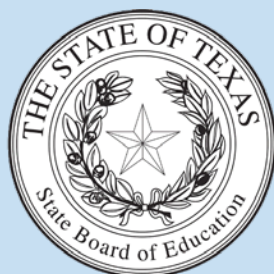
Building a Stronger Texas



Long-Range Plan for Public Education

Texas State Board of Education

September 2018





Dear Texas stakeholders,

The State Board of Education considers it an honor and privilege to serve our state, and we are thankful for the opportunity to impact the future of Texas public education. The Long-Range Plan for Public Education is a labor of love, and more importantly, it is the voice of the people of Texas expressing their aspirations and expectations for our Texas public education system. We especially want to thank the eighteen members of the Long-Range Plan Steering Committee for their dedication in creating an accurate and useful Long-Range Plan with the best interests of public schoolchildren in mind.

Early in the process, it became clear that equity and access are fundamental to the success of all students. These key principles are embedded throughout the plan and are essential to its implementation. Equity must not be thought of as all students getting the same education; rather, it is defined as all children receiving what they need to learn, thrive, and grow. Every student, school, and district across Texas has different needs, challenges, strengths, and talents; therefore, resources and support must be differentiated and tailored to ensure equitable access to success for all students.

Developed after assessing the strengths, opportunities, and challenges across Texas, the plan also focuses on student engagement and empowerment; family engagement and empowerment; and educator preparation, recruitment and retention as key areas that are vital to educational progress.

This plan is intentionally student focused. It is designed to be both inspirational and aspirational for all Texas stakeholders, including Texas students, educators, and the state's traditional and charter districts that are the core of Texas public education. It presents a series of visions that will build a stronger Texas and cultivate a civically engaged and highly educated populace.

This plan is also actionable, offering a set of recommendations for each vision. It is intended to drive and improve student outcomes, to prepare our students for achieving the Texas Higher Education Coordinating Board's goals outlined in the *60x30TX Higher Education Strategic Plan*, and to ensure Texas has a skilled and quality workforce to meet our state's ever-changing needs. Of equal importance, this plan must drive policy, legislation, and funding to improve and sustain our Texas public education system.

Public education is an investment. Our entire state must be committed to providing the support, talent, and resources to advance the capacity of our students, inspire our children, and sustain our workforce. We call upon the people, educators, policymakers, and leaders of Texas to embrace this Long-Range Plan for Public Education. Fulfilling these visions and implementing these recommendations will ensure a stronger Texas.

For our students,

The Texas State Board of Education

State Board of Education

(State Board for Career and Technology Education)

Name	District
Donna Bahorich, Chair of the State Board of Education	District 6, Houston
Marty Rowley, Vice Chair of the State Board of Education	District 15, Amarillo
Ruben Cortez, Jr., Secretary of the State Board of Education	District 2, Brownsville
Lawrence A. Allen, Jr.	District 4, Houston
Erika Beltran	District 13, Fort Worth
David Bradley	District 7, Beaumont
Barbara Cargill	District 8, Conroe
Keven Ellis	District 9, Lufkin
Patricia Hardy	District 11, Fort Worth
Tom Maynard	District 10, Florence
Sue Melton-Malone	District 14, Robinson
Ken Mercer	District 5, San Antonio
Geraldine Miller	District 12, Dallas
Georgina C. Pérez	District 1, El Paso
Marisa B. Perez-Diaz	District 3, Converse

Long-Range Plan for Public Education

Steering Committee Members

When the State Board of Education (SBOE) asked for nominations for steering committee members, the SBOE received more than 600 nominations and selected 18 members to join the committee. The SBOE was guided by a commitment to include members from across the state geographically, representing many stakeholder groups such as families, practicing educators, school board trustees, business representatives, a high school student, and associated state agencies. Among the committee members selected were representatives from the SBOE, the Texas Education Agency (TEA), the Texas Higher Education Coordinating Board (THECB), and the Texas Workforce Commission (TWC).

Name	Organization	Position
Donna Bahorich	State Board of Education Chair	District 6, Houston
Adeeb Barqawi	ProUnitas Inc.	President and Chief Executive Officer
Rikki Bonet	Dallas ISD	Prekindergarten Teacher
Avery Bullock	Weatherford High School	2018 Senior (Enrolled at Rice University)
Barbara Cargill*	State Board of Education	District 8, Conroe
Sheri Doss	Texas PTA	2017–18 President-Elect
Stacey Edmonson	Sam Houston State University	Dean of College of Education
David Gardner	Texas Higher Education Coordinating Board	Deputy Commissioner of Academic Planning and Policy
Lanet Greenhaw**	Dallas Regional Chamber	Vice President of Education and Workforce
Carol Harle	San Antonio Northside ISD	School Board Member
George Kazanas	Midway ISD	Superintendent
Tom Maynard	State Board of Education	District 10, Florence
Reagan Miller	Texas Workforce Commission	Deputy Director of Workforce Solutions
Georgina C. Pérez	State Board of Education	District 1, El Paso
Marty Rowley	State Board of Education	District 15, Amarillo
Gonzalo Salazar	Los Fresnos Consolidated ISD	Superintendent
Rebecca Shah	Texas Education Agency	Director, Academics Strategy and Performance
Ruth Lopez Turley	Rice University	Professor and Director of Houston Education Research Consortium

* Chair of Long-Range Plan Steering Committee

** Vice-Chair of Long-Range Plan Steering Committee

Acknowledgments

The Texas State Board of Education would like to thank the following organizations and individuals for their input and expertise.

Texas State Board of Education Long-Range Plan for Public Education Steering Committee

Debbie Ratcliffe, State Board of Education Support Executive Director, Texas Education Agency

Texas Long-Range Plan for Technology Advisory Committee Participants

Jim Hysaw, Retired Chief Information Officer/Chief Technology Officer, Garland ISD and Prosper ISD

Helen Mowers, Executive Director, Technology Services, Killeen ISD

Deb Dorman, Director, Digital Learning, Texas Education Agency

Leslie Garakani, Chief Technology Officer, Midlothian ISD

Victor Valdez, Chief Technology Officer, Pflugerville ISD

Hedda Alexander, Chief Technology Officer, Jacksonville ISD

Alice Owen, Retired Division Director of Technology, Irving ISD; Executive Director,
Texas K-12 CTO Council

Dianne Borreson, Chief Technology Officer, Hays ISD

David McKamie, Director, Information Services, Region 12 Education Service Center

Kimberly Domke, Coordinator, Data and Information Systems, Midlothian ISD

Mark Gabehart, Executive Director, Management Information Services, Round Rock ISD

Jennifer Bergland, Director, Governmental Relations, Texas Computer Education Association

John Vanhoorn, Director, Enterprise Solution Services, Department of Information Resources

Liz Philippi, School Program Coordinator, Texas State Library and Archives Commission

Danny Martinez, Senior Technical Assistance Consultant, American Institutes for Research

Texas Education Agency

Texas Higher Education Coordinating Board

Texas Workforce Commission

Texas Comprehensive Center at American Institutes for Research

Garry Davis

Laura Shankland

Jenny DeMonte

John Spence

Cora Goldston

Kathy Terry

Cheryl Harris

Texas Demographic Center

The subject matter experts who presented to the steering committee and prepared briefing papers on priority topics

Texas stakeholders who attended the community conversations and completed the statewide survey

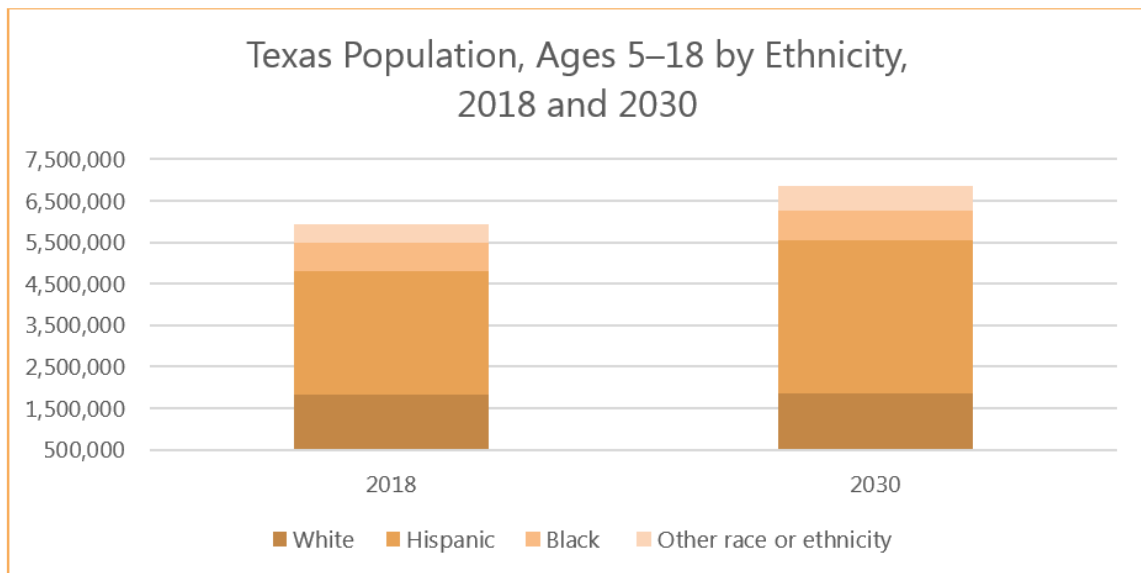
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Introduction

Texans want a system of public education that is equitable, accessible, and staffed by skilled educators and that offers opportunities for students that will carry them through school and into college, careers, and the military. Today’s students will be tomorrow’s citizens and workforce, so ensuring that Texas young people are well educated is critical for the state to have a stronger future. An effective education system is key to equipping students with the knowledge, skills, and integrity to contribute to our state in positive ways.

The population of Texas is predicted to grow by more than two million people between 2018 and 2030 if current trends continue, with about half of the population growth in the age group 5 to 18. The Texas Demographic Center estimates that of the more than 6.8 million school-aged children projected to live in Texas by 2030, 3.7 million will be Hispanic, 710,000 will be African American, 1.8 million will be white, and 596,000 will be another race or ethnicity. The population growth projections reveal the need to strengthen the state’s public education to prepare for the future student population, which will be larger and more diverse than today.¹



Source: Texas Demographic Center:
<http://txsdc.utsa.edu/Data/TPEPP/Projections/Report?id=08e347a5b4bd4e2e8afb3096ee0958cd>

Texans can also anticipate growth and changes in the state’s economy and workforce. Currently, 84% of jobs in Texas require some postsecondary education or training. Future job projections suggest that middle-skill jobs, or those jobs that require some postsecondary education but not a full four-year degree, will comprise the largest opportunity for workforce growth in the state. Middle-skill jobs account for 56% of Texas’s labor market now, but only 42% of the state’s workers are trained to the middle-skill level. As Texas begins to look at future workforce needs, it is important to consider how best to offer students opportunities to become college and career ready.²

To prepare the current and future student population for the workforce and to become engaged citizens, the Texas public education system will need to provide educators, families, and community members with the resources and strategies to meet the needs of every student. Different students will need different supports; however, all students deserve to be ready for careers and postsecondary education, and the public education system must be ready to deliver what students need to succeed.

This Long-Range Plan grows out of Texans' desire for the state's public education system to meet future needs and opportunities. It is created as a blueprint to build on the strong base that already exists in Texas and is conceived as *a vision for education in 2030*. The vision and recommendations come from Texans, specifically tailored for Texas.



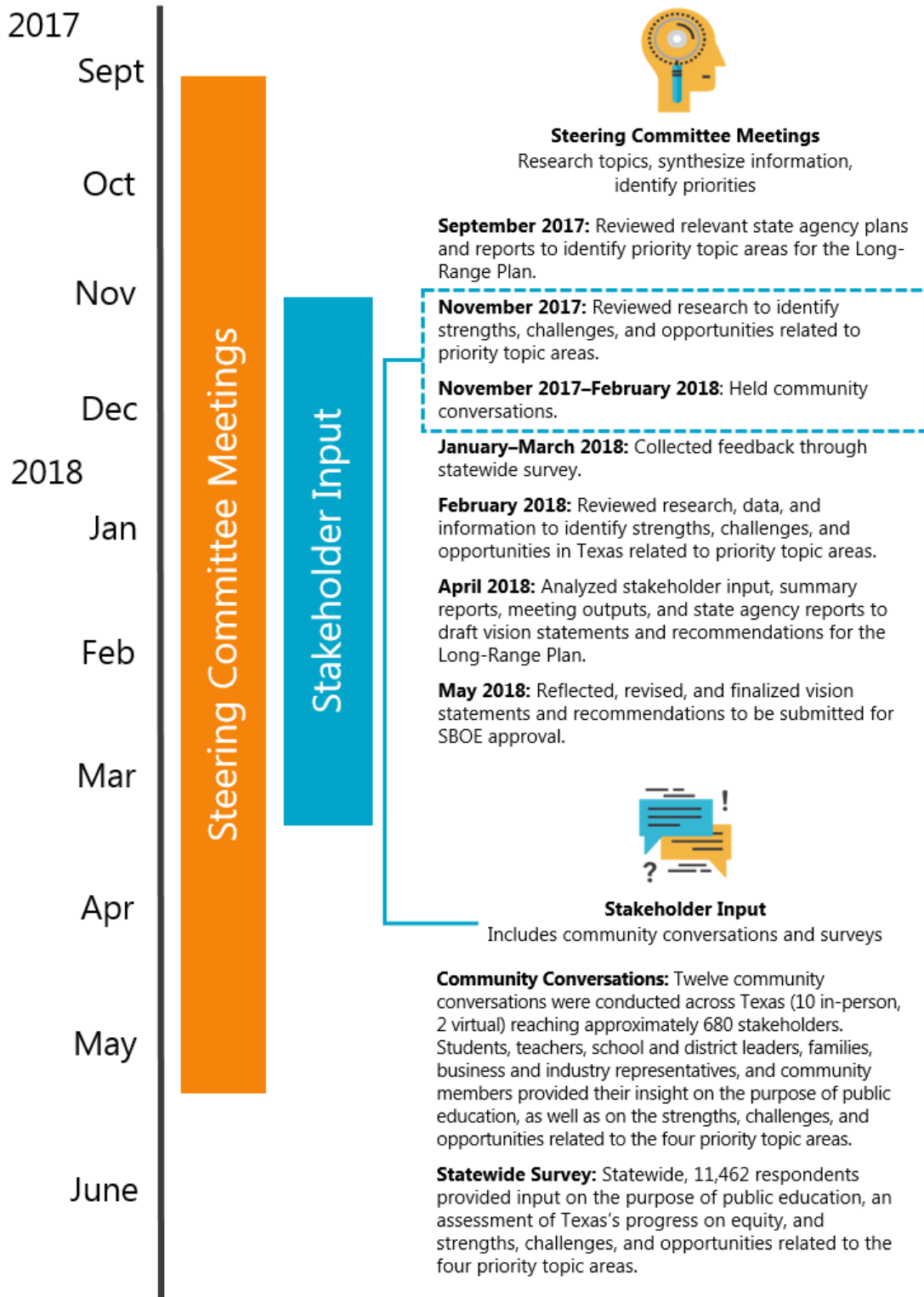
Development of the Long-Range Plan

The State Board of Education (SBOE) is required by law to adopt a long-range plan for public education. To ensure that the Texas public education system prepares all students for a productive future, the SBOE selected a steering committee to develop recommendations for the long-range plan. To develop this plan, the 18-member Long-Range Plan for Public Education Steering Committee met five times in person and collaborated online throughout the 2017–18 school year to discuss, wrestle with, identify, and agree upon the vision statements and recommendations. At the in-person meetings, committee members gathered information from presentations and reports from subject-matter experts, stakeholder input collected through 12 community conversations, a statewide survey, and other state agency plans and reports. (Summaries of the feedback collected through the survey and community conversations can be found in the appendices of this plan.)

Locations of Community Conversations



Long-Range Plan Timeline and Development Process



In assessing the strengths, challenges, and opportunities for action across the Texas public education system, the SBOE has identified four areas of focus that, when addressed by education officials, policymakers, and stakeholders, will significantly impact education in Texas:

- Equity and access
- Student engagement and empowerment
- Family engagement and empowerment
- Educator preparation, recruitment, and retention

Of these focus areas, the SBOE believes that the topic of equity and access provides the foundation for every vision and recommendation. Texas stakeholders also expressed belief that equity and access are critical to every aspect of Texas public education. Families, educators, and community members across Texas expect public schools to offer students a world-class education that will prepare them to use critical thinking skills, work with others, and lead in today's complex world. This outcome is expected for every student regardless of zip code or demographic information.

Texas Plans and Reports Reviewed During the Development of the Long-Range Plan for Public Education

- *2018–2023 Long-Range Plan for Technology*
- *Texas Education Agency Strategic Plan, 2017–2021*
- *Tri-Agency Report* (Developed by the Texas Education Agency [TEA], the Texas Higher Education Coordinating Board [THECB], and the Texas Workforce Commission [TWC])
- *60x30TX—Texas Higher Education Strategic Plan: 2015–2030*
- *Long-Range Plan for Technology, 2006–2020*
- *The Texas Model for Comprehensive School Counseling*
- *Creating a New Vision for Public Education in Texas: A Work in Progress for Conversation and Further Development* (Texas Association of School Administrators)

Equity and Access

Overarching Vision: *Equity and access* means that all children get what they need to learn, thrive, and grow.

Equity and access means ensuring equitable access to, support for, and delivery of what is required to meet the diverse needs of all students, schools, and districts. Each of these individual stakeholders has different needs, challenges, strengths, and talents; therefore, the supports for each student, school, and district should be differentiated and tailored to reflect these unique contexts while ensuring consistent, rigorous, and meaningful outcomes across all students, schools, and districts. For the state and for school districts, *equity and access* means an equitable distribution of resources and opportunities based on individual needs such that students and schools who need more support to reach an equitable outcome, compared to their counterparts, receive what they need. Resources can mean different things, including teacher quality, class size, technology, curriculum materials, advanced courses, funding, and differentiated supports for family engagement.

If the goal is to reach equitable outcomes for all students, regardless of demographics or geography, then the state must prioritize efforts to ensure that students who require more support receive what they need to be successful.

Based on input from Texas stakeholders, subject-matter experts, and committee constituencies, the vision statements outlined below provide broad recommendations for increasing equity and access in the public schools. Specific vision statements and recommendations related to student engagement and empowerment; family engagement and empowerment; and educator preparation, recruitment, and retention follow this section. Equity and access are the umbrella under which the remaining topics should be addressed.

Vision—by 2030

- All student demographic groups will be held to high expectations, supported, and enabled to reach their potential and goals, and all performance gaps will be closed.
- All students will be served by high-quality, monitored systems of support (including out of school) that is equitably distributed.
- Texas public schools will have funding that is equitably based on student needs and is efficient, sustainable, and responsible to taxpayers.
- All students will be knowledgeable about and have access to a variety of pathways and opportunities linked to work, career, and educational choices.
- All students and staff will have access to and utilize relevant technology to enhance student learning, academic outcomes, and opportunities for college and career readiness.
- All students, particularly students who are traditionally served at low-performing schools and/or who are considered at risk, will have educators who effectively facilitate their learning, development, and success.

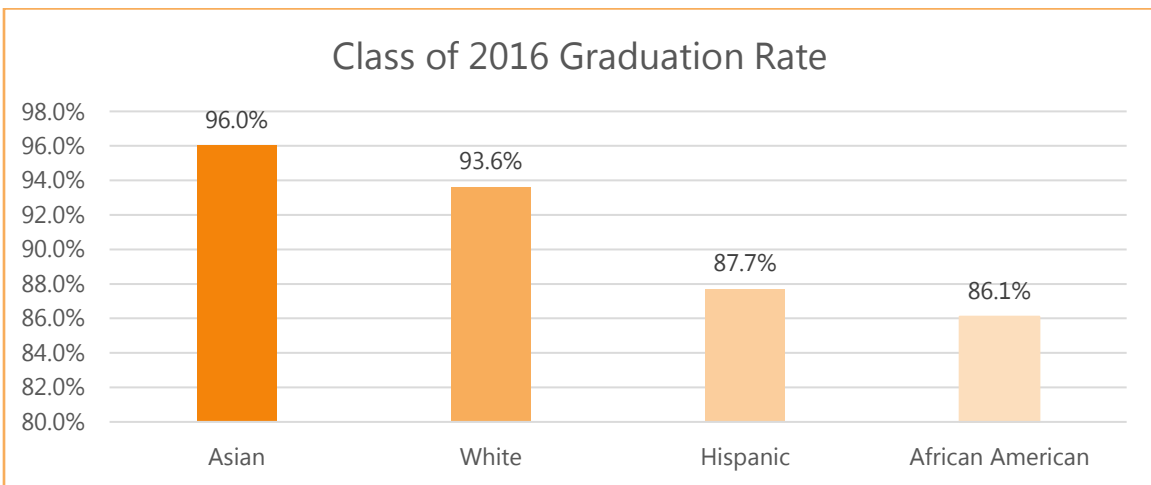
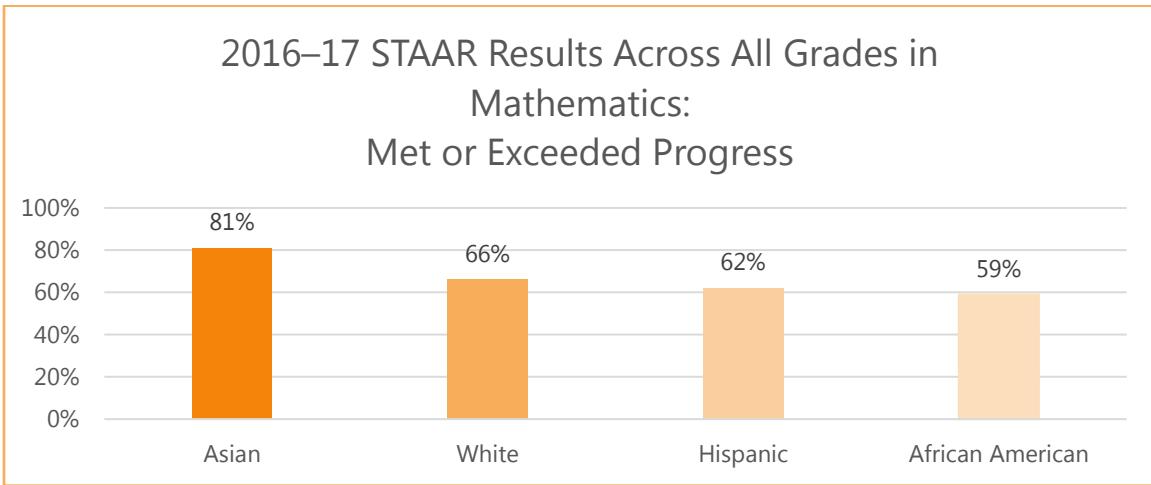
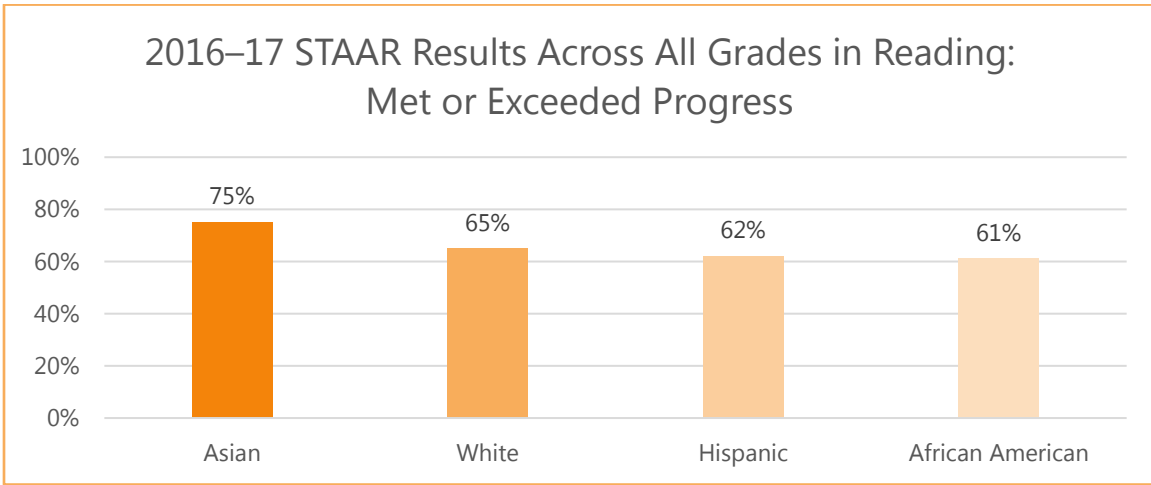
Recommendations

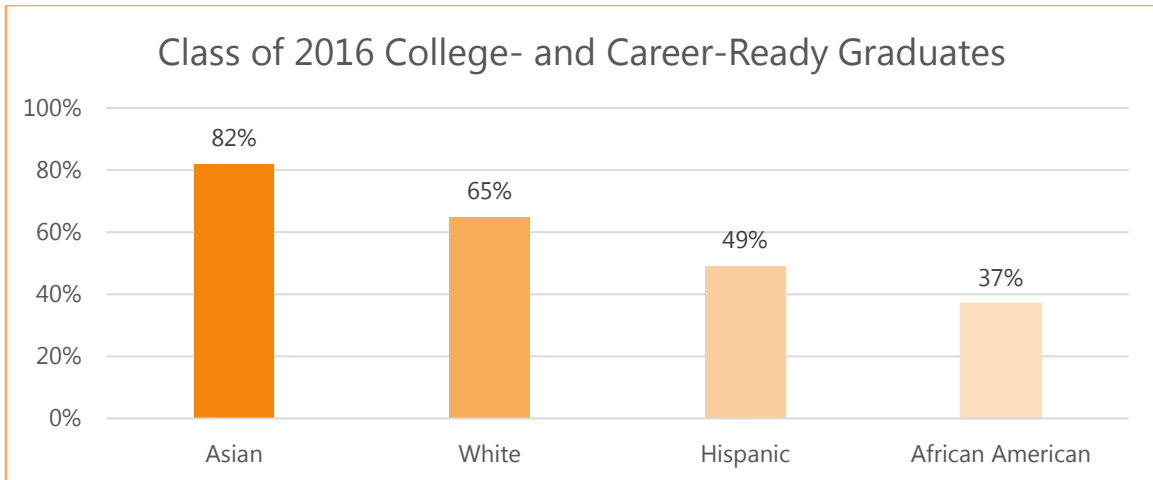
1. **Texas Education Agency (TEA), higher education, and research institutions** will conduct ongoing research and identification of inequities to guide effective implementation of policy decisions/systems change.
2. **TEA and school districts** will utilize the State Board of Education–adopted *2018–2023 Long-Range Plan for Technology* to guide the planning and implementation of local district policy. (See Appendix C of this plan.)
3. **State policymakers, locally elected boards, and appointed governing boards** will regularly identify inequities, update policies, and distribute funding and resources aligned with improving student outcomes in all schools and with all demographic groups.

The Need for Equity and Access

Questions about equitable access to resources and the impact of resources on student learning have fueled education research for more than half a century. Researchers in the United States have studied differences in educational outcomes in relation to resources, and the findings seem to echo each other. Available resources differ widely between schools and districts as do gaps in achievement between various groups of students, such as white and African American students, native English speakers and English language learners, and students living in poverty and students living in affluence.³ According to research, some of the gaps are related to the differences in resource distribution in education.⁴ Throughout this research, *resources* can mean different things, including teacher quality, class size, technology, curriculum materials, advanced courses, and funding.

Student Achievement Outcome Data by Race, 2016–17⁵





Source: Texas Education Agency, Division of Performance Reporting

These academic gaps by race represent a trend present in other academic measures of educational success captured by the state and across the nation. Many factors might explain these gaps. For example, the 2015 Equity Plan submitted by TEA to the U.S. Department of Education noted that, in schools with high concentrations of minority students and students living in poverty, there were more inexperienced, unqualified, out-of-field teachers compared to schools with low concentrations of minority students and students living in poverty.⁶ Regardless of the causes, however, these barriers to equity exist and should be addressed.

In addition to a diverse student population, the Texas public education system serves diverse communities, including urban, suburban, and rural areas. (See the chart on the next page.) *Equity and access* means recognizing the unique strengths and challenges of Texas districts and schools while providing both the support and flexibility that they need to meet their students' needs.



Count of Districts, Schools, and Students by Community Type in 2016⁷

Community Type	Major Urban	Major Suburban	Other Central City	Other CC Suburban	Independent Town	Non-metro Fast Growing	Non-metro Stable	Rural	Charters	Total
Count of Districts	11	79	41	161	68	31	174	459	183	1207
Percentage	0.9%	6.5%	3.4%	13.3%	5.6%	2.6%	14.4%	38.0%	15.2%	-
Total Number of Schools	1,356	2,049	1,191	1,212	465	104	748	919	629	8,673
Percentage	15.6%	23.6%	13.7%	14.0%	5.4%	1.2%	8.6%	10.6%	7.3%	-
Total Students	978,795	1,722,467	856,030	725,448	252,829	31,473	293,244	176,730	247,236	5,284,252
Percentage	18.5%	32.6%	16.2%	13.7%	4.8%	0.6%	5.5%	3.3%	4.7%	-

Source: Texas Education Agency



Texas Efforts to Improve Equity and Access in 2018

Specific efforts related to student engagement and empowerment; family engagement and empowerment; and educator preparation, recruitment, and retention are located in their corresponding sections in this plan. The following examples highlight efforts that, although not directly related to these priority topic areas, are fundamental to accomplishing equitable access and outcomes for all students. These descriptions are not all encompassing of what is happening in Texas but are meant to give a snapshot of a few things Texas is doing to address equity and access gaps.

Texas Equity Toolkit. TEA, as part of a requirement under the U.S. Department of Education’s Every Student Succeeds Act (ESSA), developed and launched an equity toolkit that supports school districts through a process that leads to the identification of effective strategies that can help shrink equity gaps and improve student learning for all. The main focus of this toolkit centers around helping districts understand and address the challenges they face in providing equitable access to excellent teachers for low-income students and students of color who are being taught at higher rates than other students by inexperienced, out-of-field, or ineffective teachers. TEA reports findings on this equity gap annually.⁸

Technology. In TEA’s *2018–2023 Long-Range Plan for Technology*, the agency put forth the recommendations from an advisory committee studying the topic. Among the recommendations and milestones are several that directly address the need for technology resources to be equitably distributed.

Strategic goals include:

- A personalized, flexible, and empowered learning environment
- Equitable access at schools and at home
- Digital citizenship, balancing technology with responsibility for students, educators, and families
- Safety and security
- Collaborative leadership
- Reliable infrastructure
- Cost effective and collaborative solutions⁹

The complete *2018–2023 Long-Range Plan for Technology* is included in Appendix C of this plan.



Several programs already exist in Texas with the goal of improving access to technology for all students, such as the Instructional Materials Allotment, which provides state funds to every school and open-enrollment charter school to purchase instructional materials, technological equipment, and technology-related services.¹⁰ Another program, the Classroom Connectivity Initiative, helps school districts optimize

funding for affordable, high-speed internet for schools. The program is a partnership between TEA, the state's regional education service centers, and the nonprofit EducationSuperHighway.¹¹

Advanced Coursework. Enrollment in and completion of advanced courses has been identified as a predictor of postsecondary readiness for middle school and high school students.¹² Among the advanced coursework available to schools across the United States and in many schools in Texas are Advanced Placement (AP) courses and the International Baccalaureate (IB) program, both of which include nationally or internationally benchmarked exams that allow students to demonstrate proficiency in various subjects.

Texas has a number of initiatives to encourage and increase the number of advanced courses and course takers:

- **Dual Credit.** Through this program, high school students can attend college courses and receive both high school and college credit. TEA supports some aspects of this program with state funds. A July 2018 report has found that students who participated in dual credit programs had modestly better college outcomes, including college enrollment and completion, than high school graduates who did not take dual credit courses; however, the effect of participating in dual credit programs was more positive for traditionally advantaged students. The study also found gaps in participation rates across ethnic and racial groups, with whites and Asians participating in dual credit courses at higher rates than African Americans and Hispanics. The report attributed the gaps to “differences in academic preparation, family income, and the type of high school that a student attended.”¹³
- **Early College High School.** This program blends high school and college coursework to provide students who are at risk of not graduating, students who are historically underserved, and students who wish to accelerate their learning the opportunity to earn an associate's degree and/or 60 hours of college credit tuition free. Early college opportunities include the Pathways to Technology Early College High Schools (P-TECH) program, an open-enrollment program that provides students with work-based education. In the 2017–18 school year, 198 schools were designated early college high schools, including P-TECH.¹⁴
- **Texas Science, Technology, Engineering, and Mathematics Initiative (T-STEM).** This initiative creates secondary schools that focus on improving instruction and academic performance in science and mathematics–related subjects and increasing the number of students who study and enter STEM careers. In the 2017–18 school year, 132 campuses were designated a T-STEM Academy.¹⁵
- **Industry Cluster Innovative Academies.** Launched in 2017, this program provides opportunities for work-based learning and college course credit within targeted industry clusters and focuses on graduating students with industry certifications and 60 hours of college credit and/or an associate's degree. A competitive grant for this program through the Tri-Agency Workforce Initiative funded 18 Industry Cluster Innovative Academies in nine education service center regions of the state.¹⁶



Voices of Texans

What Citizens Said About Equity and Access

Community Conversations

These comments are summaries of notes taken at the community conversations. They have been edited for clarity and are intended to reflect the perceptions and concerns of the participants.

Strengths

The strength most often mentioned in relation to equity and access is the growing awareness of diversity and student needs.

This strength was followed by the growing opportunity for student access to advanced coursework and learning pathways and access to technology.

Challenges

In every community meeting, participants said that the state's school funding system is among the greatest challenges to equity and access. This challenge was followed by access to technology and the challenge of some districts to attract and retain high-quality educators.

Opportunities

In a majority of community conversations, participants said that there is an opportunity, right now, to improve the state's system for funding schools as a way to increase equity.

The majority of participants also said that this is an opportune moment to continue to grow student access to advanced coursework and improve preparation for many career paths. They also said that engaging community members from business, community colleges, higher education, and other organizations in an effort to create internships for students is an important opportunity.

See Appendix A for more detailed results from the community conversations.

Survey Results

Survey respondents were asked to use a scale including *poor*, *fair*, *good*, or *excellent* to rate the job Texas public schools are doing in providing all students with equitable access to different education opportunities. Of the 11,462 respondents, 65.6% felt Texas schools are doing a good or excellent job in providing equitable access in areas such as advanced level coursework, technology in classrooms, and extracurricular activities. They said that Texas is doing a fair job providing access to the arts, nonacademic support, opportunities to complete community service projects, and opportunities to develop life skills. School funding, however, received a poor rating from survey respondents.

According to survey results, Texas is doing a good job meeting the needs of English language learners, students of color, students with disabilities, and students who are gifted and talented. But the state received a poor rating from respondents in meeting the needs of students living in poverty and students in the foster care system. See Appendix B for full details of the survey responses.

Student Engagement and Empowerment

Overarching Vision: All students are actively engaged in and equipped to be invested in their own academic and personal growth to achieve educational, civic, financial, career, and interest goals.

Student engagement and empowerment includes teaching, encouraging, and supporting students to be advocates for themselves, to take ownership in their learning, and to engage in their learning during and beyond the school day in multiple ways.

Student engagement and empowerment focuses on teaching and encouraging students to advocate for themselves, take ownership in their learning, and engage in learning during and beyond the school day through projects, programs, organizations, internships, mentorships, and other opportunities. When students engage in and take responsibility for their own learning, they are more likely to succeed.



Student engagement and empowerment is defined as inclusive of both future readiness, including early learning and literacy, and effective systems of support for all students, not just for students receiving special services. Future readiness addresses the need to prepare students to be globally competitive in an international economy by ensuring that they are on track from their earliest years to participate in either postsecondary or

career opportunities that are informed by projected economic demand. Effective systems of support encompass a range of high-quality, effective, and differentiated services for all students, including, but not limited to, students living in poverty and special populations (i.e., English language learners, students with dyslexia, students who are homeless, students in foster care, and students in gifted and talented programs, migrant education, and special education).

To achieve the vision for student engagement and empowerment, students and other stakeholders must make ongoing investments in quality learning that builds on students' interests, develops their talents and skills, and positions them for success in Texas, in the United States, and in the world. For Texas schools and districts, this means providing advantageous conditions for student learning and empowering students for lifelong learning in academic pursuits, personal effectiveness, healthy relationships, problem solving, critical thinking, and good citizenship. For communities and stakeholders, this means collaborating to find the best ways to support all students and encourage responsibility for their own education.

Vision—by 2030

- The Texas public education system will be student centered with opportunities embedded from early learning through graduation to achieve college, career, military, and workforce readiness.
- The Texas public education system will ensure a myriad of meaningful in-school and extended-school-day/-week enrichment opportunities for student involvement and participation.
- The Texas public education system will welcome and include student voices as equal and integral partners in discussions and decision making.
- The Texas public education system will embed teaching and learning experiences to build and foster healthy and confident individuals who embody and exhibit empathy, courage, respect, optimism, and grit.
- Quality early learning programs will be full day, fully funded, supported, and recognized as the building blocks to future academic and social success.

Recommendations

1. **Public school districts, in collaboration with school counselors and workforce boards,** will create or utilize systems or frameworks such as the Texas Model for Comprehensive School Counseling Programs to allow students to discover passions and interests for college and career pathways from elementary school through graduation, including ongoing and systemic career advising using labor market and career information about a wide range of global occupations and ways to achieve them.
2. **TEA and the Legislature** will financially incentivize an integrated and data-driven academic and nonacademic multitiered system of support (MTSS) on every campus to identify and connect all students with appropriate support services, including supports for behavioral health, mental health, and social and emotional learning. The system should also monitor and evaluate the effectiveness of the supports.
3. **TEA and the Legislature** will balance assessment and accountability systems to focus on multiple measures of assessing and reporting student performance outcomes (e.g., State of Texas Assessments of Academic Readiness [STAAR], career and technical education [CTE] certifications, portfolios, capstone projects, community service projects).
4. **The Legislature** will expand early learning opportunities to allow families access to state-funded, full-day prekindergarten for financially eligible three- and four-year-olds. By 2030, **the Legislature** will work toward universally available prekindergarten for all three- and four-year-olds.

5. **School districts, community, business, education service centers, and local workforce boards** will actively assist teachers working with businesses and industry to gain hands-on experiences that can be incorporated into the classroom.
6. **School districts** will provide multiple enrichment and leadership opportunities (e.g., clubs, organizations, teams, projects, internships) in addition to athletics, fine arts, and student council.
7. **TEA, the Texas Workforce Commission (TWC), the Texas Higher Education Coordinating Board (THECB), and the SBOE** will strengthen the alignment between the Texas Essential Knowledge and Skills (TEKS) and the College and Career Readiness Standards (CCRS).
8. **Students, families, educators, and school counselors** will ensure students take ownership of their educational journeys and personal and interpersonal effectiveness by pursuing success through active engagement with education and by taking advantage of opportunities to access business and community resources.

Texas Model for Comprehensive School Counseling Programs

Intrapersonal Effectiveness

- Positive student self-concept
- Effective executive functioning skills
- Appropriate behavior to the situation and environment

Interpersonal Effectiveness

- Effective interactions with diverse populations
- Effective and appropriate communication skills
- Recognition of personal boundaries, individual rights, and privacy needs of others
- Effective conflict resolution skills
- Development of healthy relationships

Postsecondary Planning and Career Readiness

- Motivation to succeed in personal endeavors
- Demonstration of career exploration skills
- Possession of the knowledge and skills to gather information for the purpose of postsecondary education and career planning
- Demonstration of awareness of the importance of postsecondary education
- Understanding of the relationship of academics to the world of work and to life at home and in the community

Personal Health and Safety

- Incorporation of wellness practices into daily living
- Demonstration of resiliency and positive coping skills
- Possession of assertiveness skills necessary for personal protection

Source: *The Texas Model for Comprehensive School Counseling Programs, 5th Edition*

The Need for Student Engagement and Empowerment

Efforts to improve student engagement and empowerment are supported by emerging evidence and best practices related, in particular, to effective systems of support, high-quality prekindergarten education, and postsecondary readiness. When schools and districts effectively implement an MTSS, student outcomes improve, including academic achievement, behavior, and graduation.¹⁷ In addition, schools and districts see improvements in the quality of core and special education instruction. There are many tiered models that align with MTSS, such as response to intervention (RTI), early warning systems, positive behavior and intervention support (PBIS), comprehensive school counseling programs, and trauma-informed systems of care. MTSS supports, teaches, and encourages all students to be self-advocates and take ownership of their own learning and helps districts and schools proactively identify student academic, behavioral, and mental health needs so that teachers, counselors, and other adults can provide tailored resources to empower students to be successful.



Likewise, when students begin elementary school with a solid foundation for learning, they are more likely to participate actively in their own learning. In particular, high-quality early education leads to increased predictors that a child will be ready for school.¹⁸ These predictors include skills such as persistence, the ability to regulate emotions, and attentiveness. Developing a child's memory skills and fostering social and communication skills with peers, family members, and teachers are believed to have positive impacts on reading and mathematics scores in kindergarten to fifth grade.¹⁹

Overall, research shows that, if students have strong personal and relational skills, show resiliency in their ability to finish tasks and focus on learning objectives, and demonstrate the ability to communicate effectively and clearly with peers and adults, the likelihood of school success and future readiness are increased above their peers with fewer skills in these areas. Participation in high-quality early education programs can improve academic, behavioral, cognitive, and health and well-being outcomes for students of varying backgrounds, most notably for students from disadvantaged backgrounds.²⁰

There is also growing concern about graduates' postsecondary readiness—whether college bound or not—which is reflected in employers' ongoing reports of difficulties finding workers who possess cross-cutting employability skills, including critical thinking, collaboration, communication, and digital literacy, that are transferable across the job market. Employers also note a shortage of field-specific skills that are needed in the fastest growing job markets.²¹ For Texas to meet these future workforce needs, we must provide students—beginning in their earliest years—with equitable opportunities for postsecondary success, supports to develop personal effectiveness and healthy relationships, and pathways to college and career readiness.

Texas Efforts to Improve Student Engagement and Empowerment—2018

Texas currently invests in several strategies to improve student engagement and empowerment, including MTSS, prekindergarten programming for eligible students, and college and career readiness standards.

MTSS. Texas has a number of initiatives to support the implementation of MTSS in schools. At the heart of an effective MTSS implementation are four essential components: screening, progress monitoring, multilevel prevention system, and data-based decision making. When implemented using these components and supported by validated practices, MTSS operates as a schoolwide framework that is designed and adapted, based on ongoing data analysis, to meet the changing needs of the individual students.

When implemented schoolwide, multitiered systems of support (MTSS) are designed to address all students' academic, personal, relational, and behavioral needs, including students who are gifted and talented, English language learners, students in foster care, children of military families, and many other student groups.

MTSS uses a system of tiered interventions and supports with increasing intensity. Traditionally, Tier 1 addresses all students based on principles of differentiation and Universal Design for Learning (UDL) whereas Tier 2 is designed for students who need more targeted, small-group intervention and Tier 3 involves more individualized and intensive support for students with significant academic, social, or behavioral challenges. According to TEA, an “intervention strategy” is a strategy in “MTSS that is above the level of instruction generally used in that system with all children (i.e., high-yield general education classroom instruction).” The term includes RTI and other early intervening strategies similar to the Responsive Services component found in the Texas Model for Comprehensive School Counseling programs.²² In these schools, students are taught and encouraged to be self-advocates and to take ownership of their own academic, intrapersonal, and interpersonal learning while leveraging high-quality, differentiated, and effective services that are tailored to meet their needs.

Early Learning. Texas school districts are required to offer a prekindergarten program if there are 15 or more eligible children who are 4 years old by September 1 of the current school year and who meet at least one of the following criteria:

- Are unable to speak and comprehend the English language
- Are educationally disadvantaged, which means a student eligible to participate in the national free or reduced-price lunch program
- Are homeless, regardless of the residence of the child, of either parent of the child, or of the child’s guardian or other person having lawful control of the child

- Are the child of an active duty member of the armed forces of the United States, including the state military forces or a reserve component of the armed forces, who is ordered to active duty by proper authority
- Are the child of a member of the armed forces of the United States, including the state military forces or a reserve component of the armed forces, who was injured or killed while serving on active duty
- Are in, or have been in, the conservatorship of the Department of Family and Protective Services following an adversary hearing held as provided by the relevant Family Code
- Are the child of a person eligible for the Star of Texas Award as a peace officer, firefighter, or emergency medical first responder



State-funded prekindergarten programs must also meet the High-Quality Prekindergarten program requirements in Texas Education Code (TEC) §29.167–29.171 and be consistent with the provisions of TEC Chapters 41 and 42. These requirements include use of a curriculum aligned with the *Texas Prekindergarten Guidelines*, increased prekindergarten teacher training and/or qualifications, implementation of student progress monitoring, program evaluation, and development of a family engagement plan.²³ In addition, school districts must make efforts to maintain an average ratio of not less than one certified teacher or teacher aide for each 11 students in a prekindergarten classroom.

Future Readiness. Texas was one of the first states to develop specific college and career readiness standards (CCRS), which specify what students must know and be able to do to succeed in entry-level courses at postsecondary institutions in Texas. Incorporated into the TEKS in 2008, the CCRS focus primarily on English, mathematics, science, and social studies but also have a section dedicated to cross-disciplinary standards. The CCRS also focus on key cognitive skills that college instructors use to challenge, engage, and evaluate students. The cross-disciplinary standards section does not comprehensively address the type of employability skills required to be college or career ready. However, the TEKS include an employability skills subset in every CTE course.

In the submitted ESSA plan, Texas identified achievement outcomes of annual graduates on the college, career, and military readiness indicator as a measure of school quality or student success. The following are included indicators of student college, career, and military readiness:

- Students who meet Texas Success Initiative (TSI) benchmarks in reading and mathematics
- Students who satisfy relevant performance standards on AP (or similar) exams
- Students who earn dual course credits
- Students who enlist in the military

- Students who earn an industry certification
- Students admitted into postsecondary certification programs that require as a prerequisite for entrance successful performance at the secondary level
- Students who successfully complete a college preparatory course
- Students who successfully meet the standards on a composite of indicators that indicate the student's preparation to enroll and succeed, without remediation, in an entry-level general education course for a baccalaureate or associate's degree

To support the implementation and attainment of the ESSA accountability requirements, Texas has initiated several efforts that provide students exposure to college and career readiness development opportunities:

Texas Career and Technical Education (CTE) courses lead the way in articulating employability skills required by business and industry, including conducting oneself appropriately for the workplace, cooperating and collaborating with others for a collective outcome, communicating clearly and effectively in writing and in speech, using time-management skills to prioritize and schedule tasks for efficiency and results, and demonstrating punctuality, dependability, reliability, and responsibility.

- **Early College High School (ECHS).** This program allows students least likely to attend college an opportunity to earn a high school diploma and up to 60 college credit hours. ECHS provides dual credit at no cost, offers rigorous instruction and accelerated courses, provides academic and social support, increases college readiness, and reduces college access barriers.
- **Pathways to Technology (P-TECH).** This open-enrollment program provides students with work-based education. Students complete a course of study that combines high school and postsecondary courses. Within six years, students earn a high school diploma, an associate's degree, and a two-year postsecondary or industry certificate and complete a work-based learning course.
- **T-STEM.** Rigorous secondary schools focus on improving instruction and academic performance in subjects related to science and mathematics and on increasing the number of students who study and enter careers in STEM.
- **Industry Cluster Innovation Academy (ICIA).** Open-enrollment secondary schools offer career pathways based on high-demand local workforce need and focus on graduating students with industry certification and 60 hours of college credit and/or an associate's degree by the time they graduate from high school. Targeted industry clusters include advanced manufacturing, aerospace and defense, biotech and life sciences, energy, information and computer technology, and petroleum refining and chemical products.



Voices of Texans

What Citizens Said About Equity and Access

Community Conversations

These comments are summaries of notes taken at the community conversations. They have been edited for clarity and are intended to reflect the perceptions and concerns of the participants.

Strengths

The most-often mentioned strength in the community conversations was the wide range of opportunities for college and career readiness through programs such as dual credit through local colleges, AP courses, internships, experimental learning programs, T-STEM, CTE, P-TECH, magnet schools, vocational certifications, industry-level certification, career academies, pathways, endorsements, project-based learning, cross-curricular instruction, and development of specialized schools.

Challenges

The challenges most mentioned were:

- Students' special needs are not being met.
- Students need more real-world experiences, courses, and exposure in order for them to know what opportunities are available.
- Excessive high-stakes testing and local benchmark tests and teaching to the test leaves less room for creativity, student-led learning, and critical thinking.

Opportunities

Texans see opportunity to improve student engagement and empowerment by:

- Incentivizing schools to connect more students to community members, employers, public-private partnerships, mentorships, internships, career tours, college tours, virtual career days, virtual job shadowing, business-sponsored professional development, and advocacy
- Providing cross-curricular courses and opportunities for hands-on learning and by preparing students with real-world engagement, innovative courses, and flexible curricula
- Engaging and empowering students in the community to take ownership, hold leadership opportunities, and volunteer in the community, beginning as early as elementary school
- Involving students in goal setting and giving students a voice to decide which fields they want to learn and explore further

Survey Results

Respondents to the survey had similar reactions to participants in the community conversations. Survey respondents ranked the following as their top three strategies Texas could use to improve student engagement and empowerment:

- Create career and postsecondary learning experiences for students to explore their own interests
- Allow students to be more responsible for their own learning
- Create opportunities for students to engage in the community

Family Engagement and Empowerment

Overarching Vision: All families are actively involved in their students' education at all levels.

Family engagement and empowerment includes improving the education system that helps families and community leaders serve as advocates for their children and partners in the success of the education system.

A strong education system requires the involvement of families at all levels, throughout their children's school years. Families are a key support for student growth, and involving families as partners in education is important, regardless of the challenges this involvement poses to educators and families.

The SBOE defines *family engagement and empowerment* as engaging and integrating families and parents in the education of students and facilitating parent and family education to support their children, looking at how the system works or does not work to help families and community members serve as advocates for and partners in the success of the education system. The vision and many of the recommendations for family engagement are based on the National Parent Teacher Association Standards for Family–School Partnerships.²⁴

Without question, when families engage in their students' learning, the learning improves. Texas will have a coordinated effort among TEA and districts to bring families closer to their students' school experiences.

Vision—by 2030

- Texas will have an education system and culture of trust that welcomes and values every family as an active partner by building relationships.
- All cultures that interplay with the education system will be valued and welcomed into the process for student success.
- All current and future forms of communication will be fully utilized to engage, empower, and connect with all stakeholders.
- The state and school districts will have systems and resources in place to engage, empower, and support families as they navigate through the complex educational process.

Recommendations

1. **TEA** will create a division of family engagement and empowerment that is a resource for families. Through this division, **TEA** will:
 - Create a family support call center and online portal to assist families in navigating the public school system.
 - Create an advisory council on family engagement and empowerment to inform TEA staff, legislative and state board policymakers, THECB, local districts, and other stakeholders on best practice on family and school partnerships.
2. **TEA** and **school districts** will create family engagement and empowerment metrics that are incentivized and rewarded in the state accountability system.
3. In partnerships with **families, school districts** and **communities** (e.g., **institutions of higher education, businesses**) will build and foster relationships, address differences, and support advocacy.

The following are some ways that local education agencies and community organizations can foster relationships with families.

Building Relationships

- There is a designated space for connecting with families.
- Every new family is welcomed and informed of school policies.
- Activities honor all families' contributions.
- The school is open to the community and fosters authentic relationships with partners—including seeking additional financial support with business partners for family engagement initiatives.
- All staff work to build relationships with families.

Addressing Differences

- The school hosts welcome events and other activities for families in the primary language.
- There is a standard translation and interpretation process.
- The school creates an ambassador program connecting families with someone who speaks their language.
- PTA/PTSA/PTO includes a representative sample of the school.
- Community groups support outreach to families.

Supporting Advocacy

- There is a clear, open process for resolving problems and/or receiving information.
 - There is timely two-way communication with families throughout the year.
 - Families are equipped with the knowledge and resources they need to support their children.
-

The Need for Family Engagement and Empowerment

Family engagement is increasingly recognized as the missing link in school improvement.²⁵ Research shows that the more families support their children’s learning at home, the more likely their children will do well in school and continue their education.²⁶ Studies suggest that, when families establish working relationships with teachers and are actively involved in their children’s education, these students have better attendance rates, have fewer behavioral problems and better academic performance, and are more likely to complete high school than are students whose families are not as involved in their school.²⁷



All children need their families involved in their education, but families with students in high-need schools may face particular challenges to engage in their children’s schools. Teachers in high-need schools report lower levels of family engagement and also report that they are less likely than other teachers to get preparation and support to engage families in their children’s learning.²⁸

Families, especially families in high-need areas, say that, although they want to support their children, they do not know what to do to become engaged with their children’s learning and school improvement. They lack confidence in their abilities to help their children academically or to interact with school personnel. To achieve the strongest education system possible, families must be involved. For institutions of higher education and programs that prepare teachers and for TEA, this means putting family engagement in the constellation of accountability requirements.

Texas Efforts to Improve Family Engagement and Empowerment—2018

Texas has several family engagement programs in various divisions, each with specific goals based on funding and mission.

Region 16 Education Service Center (ESC) has worked with TEA to lead parent involvement and family engagement activities for the state. This work, titled the **Statewide Parent and Family Engagement Initiative**, previously called the Title I, Part A School Support/Family and Community Engagement Initiative, is supported with federal funding through Title I, Part A of ESSA. Region 16 ESC has produced a web-based clearinghouse of publications, resources, and trainings for both educators and parents across the state and hosts an annual statewide parental involvement conference.

House Bill 4 (HB 4), addressing early childhood, was authorized by the Texas Legislature in 2015. It provides districts with an opportunity to expand or enhance high-quality prekindergarten programs for qualifying students. A requirement of this grant program is district development and implementation of a family engagement plan. To build capacity for implementation of HB 4 High-Quality Prekindergarten Programs, TEA, in partnership with the Department of Family and Protective Services and other organizations, developed guidelines for effective family engagement in 2016. The agency established a family engagement working group that identified components and strategies for school districts and charter schools to implement as part of their family engagement plans.²⁹ While the grant funding was discontinued in 2017, the quality standards and expectations remain in place for local school districts and their prekindergarten programs.

TEA administers the federal **21st Century Community Learning Centers** program funded by Title IV, Part B of ESSA. Branded in Texas as ACE (Afterschool Centers on Education), the program provides competitive grants to operate school- or community-based afterschool programs that provide access to academic enrichment and other activities designed to help students succeed and meet challenging state academic standards. Equally important, the program also provides families of participating students with active and meaningful engagement in their children's educations as well as opportunities for adult literacy.





Voices of Texans

What Texans Said About Family Engagement and Empowerment

Community Conversations

These comments are summaries of notes taken at the community conversations. They have been edited for clarity and are intended to reflect the perceptions and concerns of the participants.

Strengths

- Schools and districts have different forms of communication, including social media, newsletters, email, websites, and parent portals, for informing parents and having positive interactions.
- Schools and districts host family engagement events that inform parents about topics such as curriculum, supporting their children, academic parent-teacher teams, education legislation and requirements, technology, and student accomplishments.

Challenges

- Families are unfamiliar with the education system and do not know their rights, how to navigate the system, or how to advocate for their children; families do not know how to access technology for communicating with and navigating the education system.
- Language and cultural barriers exist that aren't being addressed.
- There is an absence of parental support (e.g., homework not a priority, parents are busy working, PTA enrollment in some schools and districts has declined).
- Effective and consistent communication between schools and families is lacking.

Opportunities

- Use all forms of communication (e.g., social media, collaborative websites, webinars, Google Classroom, online translators) to keep parents informed about what is going on.
- Provide funding and classes to support parents (English classes); classes for parents on weekends while students are in tutoring; instruction for parents on how they can tutor at home.

Survey Results

Both families and students ranked "Increase communication between schools and families (e.g., social media, newsletters)" as most important to improving family engagement.

Educators ranked "Provide classes on how families can help children at home" as most important to improving family engagement.

Both parents and educators ranked "Provide assistance to increase parent participation (e.g., transportation, child care)" as most important to improving family engagement.

Educator Preparation, Recruitment, and Retention

Overarching Vision: All Texas students will be served by a consistent and abundant talent pool of highly effective teachers and leaders who positively impact students and student learning.

Educator preparation, recruitment, and retention includes ensuring there are qualified teachers entering the field and effective teachers being retained so that every student has a qualified teacher.

To ensure that students of all backgrounds have access to a high-quality education, all students must be served by highly qualified, effective teachers. Texas must, therefore, lead the way by enlisting qualified candidates into the field of education and providing the necessary incentives and supports so that effective teachers remain in the profession.

The vision statements and recommendations include all school leaders, teachers, and the district's local governance system, because all local leaders have a broad impact on the quality of education.

Vision—by 2030

- Texas will have educator preparation programs that produce an abundant talent pool of highly effective educators who have mastered the content and pedagogy needed to teach the Texas Essential Knowledge and Skills at the level those expectations are written.
- Texas educators will be well equipped and trained to meet the diverse needs of the classroom environment.
- Texas will have an effective support system for educators that builds instructional capacity through ongoing, quality professional development and mentoring programs.
- The teaching profession will be valued and esteemed by the public, families, students, and policymakers.
- Texas will have a compensation system that facilitates the recruitment and retention of high-quality educators.
- Educators will have opportunities to advance their careers while directly impacting the classroom, including increased compensation and responsibility, based on their effectiveness, aspirational goals, and school environment.

- Texas will have effective and empowering educator and administrator evaluation systems that reward student achievement, assure educator growth, and promote career paths.
- Every campus will have effective leadership utilizing high-quality instructional leadership and human capital and resource management.
- Every district/charter school will have highly effective executive leadership and governing boards focused on improving student outcomes.

Recommendations

1. **TEA** will have meaningful performance-based accountability processes, standards, and measurable outcomes for educator preparation programs that ensure new/entry-level educators are classroom-/school-ready.
2. **Education service centers** and **institutions of higher education** will provide just-in-time guidance, training, mentoring, and support for educators and support for new, early career, and veteran teachers.
3. **The Legislature** and **school districts** will establish and sustain competitive salaries and career paths for educators through innovative compensation plans, induction programs, professional development, mentoring, and administration.
4. **The Legislature** will allow and support compensating and incentivizing educators who teach in hard-to-staff subject areas or low-performing, urban, rural, or challenging schools.
5. **TEA, the Legislature, school districts, professional associations, and industry partners** will provide incentives and support for teachers to engage in internships, externships, and ongoing professional development as part of continuing education.
6. **The Legislature** and **institutions of higher education** will provide greater flexibility in a coordinated fashion to state higher education institutions regarding the 120-hour degree plan for teacher education programs while maintaining the rigor and integrity of these programs.

The Need for Educator Preparation, Recruitment, and Retention

The number of school-age children is expected to grow by more than 900,000 between 2018 and 2030.³⁰ To meet the education needs of the state's growing population, Texas leaders and educators will need to work to recruit new teachers to the profession. It is not enough to simply recruit new teachers, however. The quality of instruction that teachers provide in the classroom is the most powerful in-school influence on student learning.³¹ To that end, policymakers and education leaders will need to work together to make sure Texas has a systemic process for preparing teachers to provide quality content instruction and engage an increasingly diverse student population. Finally, Texas also needs to retain the teachers it has already invested in. In

2015–16, teacher mobility was 22%, up slightly from previous years.³² Replacing a teacher is costly and time consuming, and teacher turnover can also have an adverse impact on student achievement.³³

Teacher Retention and Turnover in Texas

In 2017, the Regional Educational Laboratory Southwest (under contract to the U.S. Department of Education) produced a report about teacher mobility in Texas. The key findings include the following:

- During the 2011–12 school year approximately 19% of Texas teachers moved between schools within a district, moved between districts in Texas, or left teaching in Texas public schools. By 2015–16 the teacher mobility rate had reached 22%. Although teachers leaving Texas public schools accounted for the largest share of the teacher mobility rate during the period, teachers moving between districts accounted for most of the increase in mobility rates.
- Teachers with special education certification left Texas public schools at nearly twice the rate of teachers with other teaching certifications.
- Schools with higher proportions of special education, low-performing, and racial/ethnic minority students were associated with higher teacher mobility rates, and schools with higher proportions of English language learner students were associated with lower rates.
- Schools with higher overall ratings on the Texas Teacher Evaluation and Support System (T-TESS) evaluation rubric tended to have lower teacher mobility rates.

In addition, the study found more than half of teachers who left their positions actually left the profession, and the other teachers moved between schools and districts. The study also found that teacher mobility varied between regions in Texas. Four regions—Edinburg, Fort Worth, Amarillo, and El Paso—had the lowest average mobility rates, while Victoria, Waco, Abilene, and Midland had the highest average mobility rates.³⁴

Texas Efforts to Improve Educator Preparation, Recruitment, and Retention—2018

Preparation. Texas has the most diverse teacher preparation market in the United States. The state has 135 teacher preparation providers offering a total of 260 programs, of which 153 are traditional programs and 107 are alternative certification programs. In 2015–16, there were 18,254 candidates enrolled in traditional preparation programs and 48,965 candidates enrolled in alternative programs.³⁵

One of the state’s challenges is to monitor the quality of the wide variety of preparation programs, which range from traditional undergraduate programs leading to a bachelor’s degree to an online alternative certification course with 30 hours of observing in a classroom before taking over as a full-time classroom teacher. TEA has implemented an accountability system for educator preparation that evaluates teacher preparation programs based on the measures shown below.³⁶

Accountability Measures for Texas Teacher Preparation Providers

Indicator 1: Percent Completers Passing Certification Examinations

Indicator 2: Principal Appraisal of First-Year Teachers

Indicator 3: Improvement in Student Achievement*

Indicator 4a: Frequency and Duration of Field Observations**

Indicator 4b: Quality of Field Supervision**

Indicator 5: Satisfaction of New Teachers***

*Data for this measure are under development. There is no standard for improvement in achievement at this time.

**Includes both the frequency and duration of field observations, as well as the quality of field supervisors.

***This measure is currently being piloted.

Recruitment. TEA currently has a “Grow Your Own” grant program for districts and preparation programs to recruit new teachers into the system and to support them as they train to become teachers. The program recruits high school students to teaching, supports paraprofessionals in completing teacher preparation programs, and creates residency programs in traditional teacher preparation programs to provide more clinical experiences before participants become classroom teachers. As the student population of Texas becomes more diverse, Texas leaders will need to recruit teachers who are prepared to teach in diverse classrooms. Research indicates that minority students who are taught by a minority teacher are less likely to exhibit behaviors that require disciplinary actions.³⁷

Retention. Teacher preparation plays a role in teacher retention—one study found that teachers who entered the profession through an alternative certification program were 25% more likely to leave their schools than were teachers who entered through a traditional program.³⁸ In Texas, there were different rates of retention based on alternative versus traditional teacher preparation.



Of teachers eligible to enter the workforce in 2014–15, 88.8% of those from alternative programs were employed as teachers that academic year, compared with 92.2% of graduates of post-baccalaureate programs, and 94% of those trained in undergraduate programs. The percentage of those retained in teaching in Texas three years later was 75.9% of those prepared in alternative programs, 79% of those prepared in post-baccalaureate programs, and 86% in undergraduate programs.³⁹

According to a study of teachers across the United States—including Texas teachers—first-year teachers who took more courses in teaching methods and strategies were significantly less likely to depart.⁴⁰ Other factors, such as preservice clinical experiences prior to full-time teaching responsibilities and in-service

professional development once teachers are in the classroom can also increase the likelihood of teachers staying in the profession. Studies have suggested other strategies to retain effective teachers, including supporting teachers to set and achieve career goals and attain degrees or certifications.⁴¹

For all Texas students to have access to a teacher able to meet their needs, the state will need a strong, articulated, and supported human capital management system for educators.

Reasons Teachers Leave Teaching

The results of a national survey of teachers reveal that teachers change schools or leave the profession for different reasons:

- Personal or life reasons, such as working closer to home or pregnancy, 43%
- Change of career, 31%
- Retirement, 31%
- Dissatisfaction with testing and accountability pressures, 25%
- Lack of administrative support, 21%
- Dissatisfaction with the teaching career, 21%
- Dissatisfaction with working conditions, including large class sizes and lack of other resources and facilities, 19%
- Financial reasons, 18%⁴²





Voices of Texans

What Texans Said About Educator Recruitment, Preparation, and Retention

Community Conversations

These comments are summaries of notes taken at the community conversations. They have been edited for clarity and are intended to reflect the perceptions and concerns of the participants.

Strengths

- Teachers have a passion for the kids—the majority of individuals entering the profession still have a passion and desire to make a positive impact on children. Educators are there for the “ah-ha” moment [when students are learning].
- Districts and schools are using a variety of alternative certification programs to recruit educators with outside, technical experiences to the classroom.
- Instructional coaches and mentoring programs help new teachers succeed.

Challenges

- Teachers need higher salaries and commensurate salary increases over time.
- Teachers need greater appreciation, respect, time, resources, support, honor, and better public reputation.
- Colleges and teacher preparation programs are not aligned with actual teaching, nor do they prepare teachers for the realities of classroom teaching (e.g., parents, student discipline problems, planning good instruction).
- Teachers are not sufficiently prepared to teach a diverse population of children (e.g., disabilities, special education, social and emotional needs, bilingual, families in poverty).
- Alternative certification programs do not have the intensive training needed for success in the classroom, and programs lack consistency in high-quality teacher training.

Opportunities

- Provide appropriate professional development for new and veteran teachers, instructional coaching, feedback from student surveys.
- Increase teacher salaries.
- Foster ways to promote the profession and provide loan forgiveness; tuition waivers; grants for teacher preparation college education, such as supporting teacher aides to become teachers; and Grow Your Own programs.

Survey Results

Survey respondents noted the following as the top three strategies to improve educator preparation, recruitment, and retention:

- Ensure teachers in our highest need schools are paid at least as much as teachers in more affluent schools within the same district.
- Create leadership and advanced career opportunities for teachers who want to remain in the classroom.
- Ensure school leaders have the flexibility to staff their schools based on the specific needs of their students and communities.

Endnotes

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Appendix A. Community Conversations

To help the State Board of Education gather public input to shape the new plan and set long-term goals through the year 2030, State Board members and the Long-Range Plan for Public Education Steering Committee held a series of community conversations across Texas. State Board of Education and steering committee members hosted 10 in-person and 2 remote events, with a total of 680 participants.

The in-person events were held at the following locations, with the number of participants shown in parentheses: Amarillo (38), Austin (30), Dallas (38), Edinburg (95), El Paso (60), Fort Worth (60), Houston (85), Kilgore (35), Salado (60), and San Antonio (146). The virtual events were held in Corpus Christi and Victoria, with combined attendance of 33 participants.

In each community conversation, participants identified the purpose or desired outcome of public education and gave feedback on strengths, challenges, and opportunities in the four topics selected by the steering committee: equity and access; student engagement and empowerment; family engagement and empowerment; and educator preparation, recruitment, and retention.

To access the final summary of the community conversation results, visit [https://tea.texas.gov/SBOE/long-range plan/](https://tea.texas.gov/SBOE/long-range_plan/).

Purpose or Desired Outcome of Public Education

The table below outlines the most common answers to the question “What is the purpose or desired outcome of public education?” The comments are summaries of notes taken at the *community* conversations. They have been edited for clarity and are intended to reflect the perceptions and concerns of the participants.

PURPOSE OR DESIRED OUTCOME OF PUBLIC EDUCATION	El Paso	Kilgore	Ft. Worth	Dallas	San Antonio	Salado	Edinburg	Corpus Christi and Victoria (virtual)	Houston	Austin	Amarillo	Number of communities where topic was discussed
<i>Number attended = 680</i>	60	35	60	38	146	60	95	33	85	30	38	
Prepares all students to be adults who contribute to their community through civic engagement, community service, and social awareness and action	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11
Prepares students to be good adult citizens (successful, productive, patriotic, responsible, valuable; contribute to society, lead the country, improve government, and improve lives)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11
Prepares students to be responsible; independent; and college, career, or military ready (e.g., employable skills, vocational training, ready for the real world, set goals, make a living, real-life experiences, exposure to career possibilities, long-range planning)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11
Creates and provides equal access to free, quality education for all students, including fair treatment across all demographics and levels of ability (gifted students, challenged students) and support to thrive, succeed, and reach highest potential	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11

PURPOSE OR DESIRED OUTCOME OF PUBLIC EDUCATION	El Paso	Kilgore	Ft. Worth	Dallas	San Antonio	Salado	Edinburg	Corpus Christi and Victoria (virtual)	Houston	Austin	Amarillo	Number of communities where topic was discussed
Develops life skills, such as critical thinking skills, leadership skills, decision making, problem solving, accountability, responsibility, time management, grit, resilience	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11
Helps students find their talents and interests; prepares students with skills and knowledge so they will reach their fullest potential	✓			✓	✓	✓	✓	✓	✓	✓	✓	9
Teaches academics for a well-rounded future; includes mathematics and science, ELA (reading, literacy, writing), social studies, history, arts	✓	✓	✓	✓	✓	✓	✓			✓		8
Equips students to be technologically savvy (ready for a future and career with more automation, robots, machines, and increasingly sophisticated technology)		✓	✓	✓	✓	✓	✓			✓	✓	8
Develops well-rounded citizens who are educated on a common body of knowledge and have a global perspective and awareness	✓	✓	✓	✓		✓	✓	✓				7
Teaches diversity and inclusivity by teaching students to interact and constructively function with people who have ideas and mindsets different from their own	✓	✓	✓		✓	✓				✓	✓	7

Priority Topics for Long-Range Plan

The following tables provide an overview of the most common responses to questions about challenges, strengths, and opportunities related to the four areas that the Long-Range Plan for Public Education Steering Committee prioritized.

The comments are summaries of notes taken at the community conversations. They have been edited for clarity and are intended to reflect the perceptions and concerns of the participants.

Equity and Access

Strengths

- Awareness of equity and access issues, diversity and inclusion
- Options for learning pathways for all students—earned certificates (endorsement), dual enrollment, advanced placement courses, basic, etc.
- A push for technology access has increased device access (e.g., iPads), access to advanced courses
- Dual credit programs provide higher education for little to no cost for students
- Relationships with community colleges and businesses provide students with learning opportunities (advanced classes, career and technical education [CTE], certifications)

Challenges

- Overall, the funding system is outdated, broken, and set up to be inequitable; equity needs to be a priority to offer equal opportunities no matter where students live (e.g., zip codes, rural) in Texas
- Technology upgrades and internet access in schools and homes is limited and unequal
- Funding across the state varies between districts with smaller vs. larger tax bases, preventing equitable services for all students (e.g., some can pass bonds, some can't)
- Not all communities (e.g., rural, poor) offer Advanced Placement (AP) classes. Support for AP classes across various student populations is often overlooked; not everyone has equal access. Students need more access to dual credit and AP courses in all schools.
- Students have unequal access to healthcare, nutritious/quality food, and school counselors, glasses, and other supports

Opportunities

- Engage businesses, community colleges, nonprofits in the community (rural and urban) to develop partnerships and provide resources and courses (e.g., dual enrollment, internships, space rentals)
- Fix tax structures related to school funding/property tax; state funding needs to be restructured
- More grants are needed for technology (access and training) and special programming
- Access to quality programs—CTE, advanced coursework, foreign language—across the state. Use technology to increase access.
- Ensure teachers are in classrooms that match content, training, and certification (highly qualified teachers in classrooms)

Student Engagement and Empowerment

Strengths

- Expose students to college and career readiness through dual credit through local universities; AP courses; internships; experimental learning programs; Texas Science, Technology, Engineering, and Mathematics (T-STEM) initiative; career and technical education (CTE); magnet schools; vocational certifications; industry-level certification; career academies; pathways; endorsements; project-based learning; cross-curricular instruction; and development of specialized schools
- Districts empower students through choices for personalized learning, individualize education and graduation paths, and provide exposure to a variety of opportunities and fields for all students
- Schools implement technology that enhances engagement and education (e.g., virtual labs, Google Classroom, access to information, assistive technology, real-world equipment)
- Schools provide extracurricular activities that engage students in their schools, create leadership roles, and foster a sense of community (e.g., football, volleyball, band, cheerleading, ROTC, technology, robotics, First LEGO League, student council)
- Public-private partnerships where companies engage students by donating items or other support, providing alumni and other guest speakers, being involved with schools and students

Challenges

- Students need more real-world experiences, courses, and exposure in order for them to know what opportunities are available
- Excessive testing (e.g., TEKS, STAAR) and "teaching to the test" leaves less room for creativity, student-led learning, and critical thinking
- Students are a number in the system, instead of a whole person of value, which emphasizes academics rather than social skills and learning about personal and interpersonal effectiveness
- Teacher training in skill sets, new practices, and technology is needed to support and reach all students
- Diversity of teaching force does not fully reflect the diversity of the school population to meet all student needs (e.g., culture, language)
- Poverty and hunger lead to students' physical needs not being met (shelter, food, healthcare)

Opportunities

- Incentivize schools to connect more students to community members, employers, public-private partnerships, mentorships, internships, career tours, college tours, virtual career days, virtual job shadowing, business-sponsored professional development, and advocacy
- Provide cross-curricular courses and opportunities, hands-on learning; prepare students with real-world engagement, innovative courses, and flexible curriculum
- Engage and empower students in the community to take ownership, hold leadership opportunities, and volunteer in the community, even at an earlier age
- Involve students in goal setting and give students a voice to decide which fields they want to learn about and explore further
- Teach technology skills through projects (e.g., developing apps) to engage students

Family Engagement and Empowerment

Strengths

- Technology such as social media can be used correctly and positively for communication to parents; potential for parent communication through all avenues (e.g., social media, email, photo apps, newsletters, parent portal, Google, newsletters); for example, sending parents pictures of what is going on at school
- Family engagement nights and other events can introduce parents to curriculum and “how to’s” for their children (e.g., academic parent-teacher teams, family engagement nights in ESSA, technology, communication, showcases of student accomplishments)
- PTA/PTOs/parents volunteering at schools have an impact
- Community organizations exist that can serve as a bridge between schools and families when schools lack the resources to address issues at home; examples are community partners (such as public library for family literacy), nonprofits, community gardens
- Teachers are communicating and reaching out to parents, supporting families

Challenges

- Parents unfamiliar with school system; do not know their rights, how to navigate the system, or what they can do to help their child; not technology savvy
- Language and cultural barriers exist that aren’t being addressed
- There is an absence of parental support (e.g., homework not a priority; parents are busy working; PTA enrollment has declined)
- Lack of effective and consistent communication between schools and families
- Atmosphere is not welcoming to families, including nontraditional families (from the receptionist, to the administration, to the teacher)

Opportunities

- Use all forms of communication to keep parents informed (e.g., social media, collaborative websites, webinars, Google Classroom, online translators)
- Funding and classes to support parents (English classes); classes for parents on weekends while students are in tutoring; instruction for parents on how they can tutor at home
- Reach out to parents by first building relationships with them and connecting early and often
- Work to reduce language and cultural barriers to focus on specific needs (e.g., multilingual office staff, fellow parents translate at school meetings)
- Partnerships with businesses and universities to hold events that help build ties to students and families; database of speakers

Educator Preparation, Recruitment, and Retention

Strengths

- Districts and school using a variety of alternative certification programs to recruit teachers with outside/technical experience to the classroom
- Instructional coaches and mentoring programs (e.g., Bell mentor program, TX BESS) help new teachers succeed
- Teacher passion for the kids; majority of those entering the profession still have a passion and desire to make a positive impact on children—there for the “aha” moment
- Educator prep programs have high, up-to-date standards
- Salary levels are higher to recruit teachers at beginning level; entry-level salaries are more competitive; salaries aren’t as low as in other places

Challenges

- Teachers need higher salaries for their work (and to pay bills and student loans) and opportunity for salary increases over time
- Teachers need greater appreciation, respect, time, resources, support, and honor, and a better public reputation
- Colleges and teacher preparation programs are not aligned with actual teaching; do not prepare teachers for the realities of classroom teaching (e.g., parents, student discipline problems, planning instruction)
- Teachers are not sufficiently prepared to teach diverse populations of children (e.g., disabilities, special education, social and emotional needs, bilingual, families in poverty)
- Alternative certification programs that don’t have the depth of training needed for success in the classroom; programs don’t consistently provide high-quality teacher training

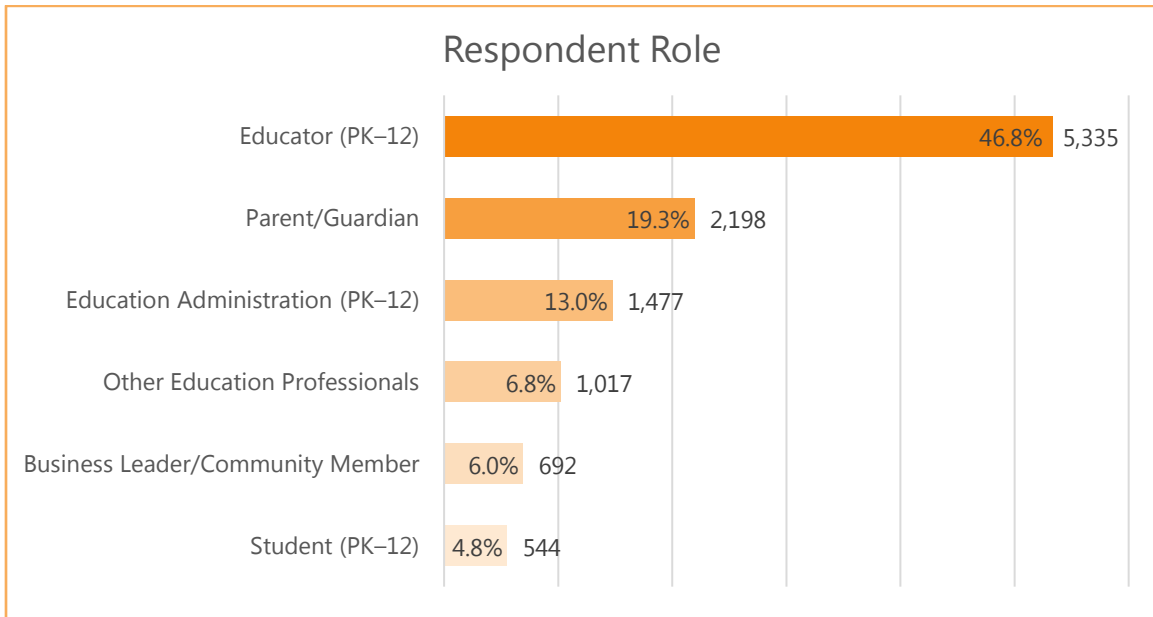
Opportunities

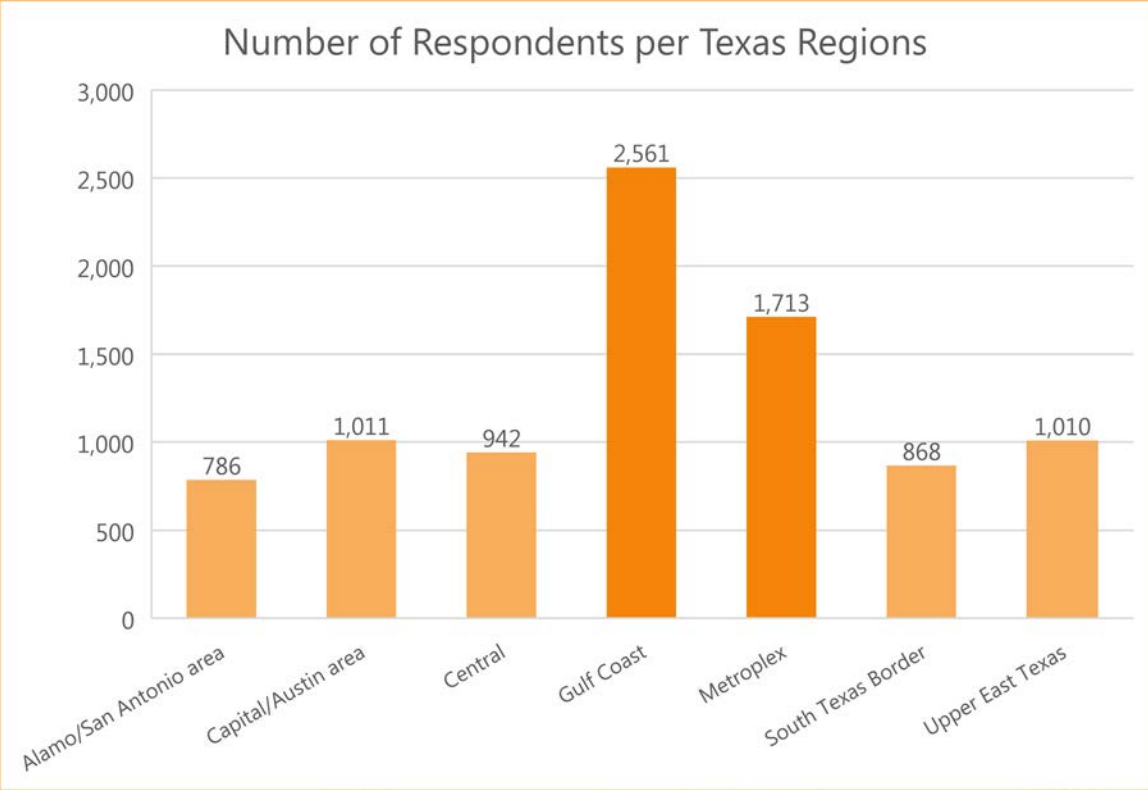
- Professional development as appropriate mentorship support for new teachers, professional learning centers (PLCs), instructional coaching from leadership, feedback from student surveys
- Find ways to give teachers a higher salary, pay raises based on quality, and better benefits; for retention, provide bigger incentives for advanced education, higher incremental salary schedule, on-campus stipends for teacher-coaches to grow; “next door” home buying
- Get professionals to promote the profession of teaching (build empathy between teachers and community; set reasonable expectations)
- Include student teaching before employment to prepare new teachers; co-teaching, and more and longer internships; give potential teachers more exposure to teaching
- Loan forgiveness, tuition waiver, grants for teacher prep college education (e.g., for lower-income students, teacher aides to become teachers, “Grow Your Own” program)

Appendix B. Survey

Respondents

A total of 11,462 respondents participated in the survey, with 9,544 respondents completing all survey questions. All respondents (completed surveys and partially completed surveys) were included in these analyses, and, as a result, the number of responses presented vary by question. Graphs are displayed to show the response rates for primary role and home region of respondents. Additional demographic information is in the final survey results.





Results

Equity Questions

Respondents were asked to use a scale from *Poor* to *Excellent* to rate the job Texas public schools are doing in providing all students with equitable access to supports and opportunities.

Equity and Access Responses (By Percentage)					
	Poor	Fair	Good	Excellent	No Responses
Advanced level coursework (e.g., Advanced Placement, dual credit)	6.8	21.0	45.2	20.4	6.7
Classrooms equipped with technology (e.g., computers, internet)	15.7	30.2	38.9	13.5	1.7
Effective educators	6.7	27.2	50.7	14.1	1.3
Extracurricular opportunities	6.3	16.8	42.5	31.5	2.8
Exposure to arts and culture	21.6	34.7	31.5	10.1	2.1
Funding	54.9	28.5	12.1	2.0	2.5
Non-academic support (e.g., counselors, social workers)	30.3	36.7	25.2	4.7	3.0
Opportunities to complete community service projects	23.6	37.4	24.7	4.4	9.9
Opportunities to develop life skills (e.g., communication, problem-solving, critical thinking)	19.0	39.3	33.5	6.0	2.1

*Number of respondents ranges from 9,343 to 9,401.

Respondents were also asked to use a scale from *Poor* to *Excellent* to rate the job Texas public schools are doing in meeting the needs of various groups.

Meeting Needs Responses (By Percentage)					
	Poor	Fair	Good	Excellent	No Responses
English language learners	12.8	29.6	38.6	11.3	7.7
Students of color	13.2	27.8	39.6	11.6	7.8
Students living in poverty	23.1	34.6	29.4	7.4	5.5
Students living in foster care system	20.7	29.0	27.1	5.4	17.8
Students with disabilities or special needs	19.2	27.5	35.0	13.8	4.6
Students who are gifted and talented	12.6	29.0	41.3	13.0	4.1
Parents	11.6	32.9	40.6	8.5	6.4

*Number of respondents ranges from 9,334 to 9,404.

Desired Outcome of Public Education Ranking Results

What is the desired outcome of public education in Texas? (Please rank your top 3 choices.)

Ranking Results for Desired Outcome of Public Education Item		
Rank	Ranked Concepts	Number Who Ranked as 1, 2, or 3
1	To teach communication, problem-solving, critical thinking and other employability skills	9,303
2	To prepare students to be productive citizens of society	8,221
3	To develop lifelong learners	6,263
4	To teach academic knowledge and skills	5,053
5	To teach ethics and morals	1,661
6	To help students develop basic life skills (e.g., hygiene, nutrition)	1,148

Ranking Results for Desired Outcome of Public Education Item by Group*		
Rank	Educators	Parents
1	To teach communication, problem-solving, critical thinking and other employability skills	To teach communication, problem-solving, critical thinking and other employability skills
2	To prepare students to be productive citizens of society	To prepare students to be productive citizens of society
3	To develop lifelong learners	To teach academic knowledge and skills

* Student rankings matched educator rankings.

Note. For all ranking questions, the full sample has been displayed as well as the top three ranking choices for educators, parents, and students. These three stakeholder groups were highlighted for display in this report because: (1) they represent the largest groups of stakeholders who completed the survey, and (2) at least one of the committee's priority topics related to these groups directly.

Educator Preparation, Recruitment, and Retention Ranking Results

What strategies could Texas schools use to prepare, recruit, and retain effective teachers across the state? (Please rank your top 3 choices.)

Ranking Results for Educator Preparation, Recruitment, and Retention Item		
Rank	Ranked Concepts	Number Who Ranked as 1, 2, or 3
1	Ensure teachers in our highest need schools are paid at least as much as teachers in more affluent schools within the same district.	4,567
2	Create leadership and advanced career opportunities for teachers who want to remain in the classroom.	4,415
3	Ensure school leaders have the flexibility to staff their schools based on the specific needs of their students and communities.	4,221
4	Provide mentoring for beginning teachers in their first few years in the classroom.	4,097
5	Ensure that teacher preparation programs focus on the skills and practices most linked to student achievement.	3,654
6	Evaluate whether the professional development teachers are getting is actually helping them provide better outcomes for their students.	3,417
7	Provide opportunities for professionals in specialized fields to become teachers, particularly in subjects in high demand such as mathematics, science, and bilingual education.	2,347
8	Ensure all teachers consistently receive feedback on their performance, including teacher evaluations.	1,015

Ranking Results for Educator Preparation, Recruitment, and Retention Item by Group

Rank	Educators	Parents	Students
1	Ensure teachers in our highest need schools are paid at least as much as teachers in more affluent schools within the same district.	Ensure school leaders have the flexibility to staff their schools based on the specific needs of their students and communities.	Ensure teachers in our highest need schools are paid at least as much as teachers in more affluent schools within the same district.
2	Create leadership and advanced career opportunities for teachers who want to remain in the classroom.	Ensure teachers in our highest need schools are paid at least as much as teachers in more affluent schools within the same district.	Ensure school leaders have the flexibility to staff their schools based on the specific needs of their students and communities.
3	Ensure school leaders have the flexibility to staff their schools based on the specific needs of their students and communities.	Create leadership and advanced career opportunities for teachers who want to remain in the classroom.	Create leadership and advanced career opportunities for teachers who want to remain in the classroom.

Parent Engagement and Empowerment Ranking Results

What are the most important actions Texas schools can take to increase parent engagement and empowerment? (Please rank your top 3 choices.)

Ranking Results for Parent Engagement and Empowerment Item		
Rank	Ranked Concepts	Number Who Ranked as 1, 2, or 3
1	Provide classes on how families can help children at home.	6,189
2	Provide assistance to increase parent participation (e.g., transportation, child care).	5,454
3	Increase communication between schools and families (e.g., social media, newsletters).	4,515
4	Hire parent liaisons to connect families with schools.	4,206
5	Increase school events that invite families into the school building.	4,178
6	Create and support opportunities for school personnel to make home visits to families.	2,705

Ranking Results for Parent Engagement and Empowerment Item by Group			
Rank	Educators	Parents	Students
1	Provide classes on how families can help children at home.	Increase communication between schools and families (e.g., social media, newsletters).	Increase communication between schools and families (e.g., social media, newsletters).
2	Provide assistance to increase parent participation (e.g., transportation, child care).	Provide assistance to increase parent participation (e.g., transportation, child care).	Provide classes on how families can help children at home.
3	Hire parent liaisons to connect families with schools.	Provide classes on how families can help children at home.	Provide assistance to increase parent participation (e.g., transportation, child care).

Student Engagement and Empowerment Ranking Results

What strategies could Texas schools use to increase student engagement and empowerment?
(Please rank your top 3 choices.)

Ranking Results for Student Engagement and Empowerment Item		
Rank	Ranked Concepts	Number Who Ranked as 1, 2, or 3
1	Create career and postsecondary learning experiences for students to explore their own interests.	8,074
2	Allow students to be more responsible for their own learning.	6,856
3	Create opportunities for students to engage in the community.	7,343
4	Provide opportunities for students to voice their opinions in schools.	4,743

Ranking Results for Student Engagement and Empowerment Item by Group*		
Rank	Educators	Parents
1	Create career and postsecondary learning experiences for students to explore their own interests.	Create career and postsecondary learning experiences for students to explore their own interests.
2	Allow students to be more responsible for their own learning.	Create opportunities for students to engage in the community.
3	Create opportunities for students to engage in the community.	Allow students to be more responsible for their own learning.

*Student rankings matched parent rankings.

Open-Ended Comments Results

Respondents were also allowed to share open-ended comments for each priority topic. The following table displays the question topic as well as the emerging themes that were captured from the first scan of open-ended responses. The emerging themes are listed in alphabetical order.

Question Topic	Emerging Themes	
Desired Outcome of Public Education	■ Academics	■ Life skills
	■ Critical thinking	■ Prepare for college and/or career
	■ Eliminate and/or reduce testing	■ Productive citizens
	■ Ethics and morals	
Educator Preparation, Recruitment and Retention	■ Better insurance and retirement benefits	■ Reduce class sizes
	■ Eliminate and/or reduce testing	■ Reduce paperwork
	■ Funding	■ Respect for teaching profession
	■ Increase salary	■ Teacher autonomy
Equity and Access	■ Build business partnerships	■ Increase technology in schools
	■ Eliminate and/or reduce testing	■ Offer advanced coursework statewide
	■ Increase funding and reform Robin Hood policy	
Parent Engagement and Empowerment	■ Address language barriers	■ Parent accountability
	■ Increase communication	■ Welcoming environment and school culture
	■ More parent engagement opportunities	
	■ Offer parent classes and parent education	
Student Engagement and Empowerment	■ Eliminate and/or reduce testing	■ Increase student voice, and listen to students
	■ Increase critical thinking classes	■ More internships and work experiences
	■ Increase real-life classes—vocational, life skills	
Additional Input	■ Address the students with special needs	■ Increase equitable funding and reform funding policies
	■ Address the whole child, including mental health	■ Increase parent and student accountability
	■ Eliminate and/or reduce testing	■ Respect and value teachers
		■ Teacher compensation and benefits

Appendix C. *Public Education in Texas: An Assessment of State Plans, Reports, and Data (Abridged)*

To set the stage for the work of the Long-Range Plan for Public Education Steering Committee (LRP Steering Committee), the Texas Comprehensive Center (TXCC) at American Institutes for Research conducted a review of relevant strategic plans and priorities relating to Texas public primary and secondary education. The complete assessment is available on the Long-Range Plan for Public Education web page at http://tea.texas.gov/SBOE/long-range_plan/.

This review included the following reports and data sources:

- *Texas Education Agency Strategic Plan, 2017–2021*
- *Long-Range Plan for Technology, 2006–2020*
- *2016 Progress Report on the Long-Range Plan for Technology*
- *Prosperity Requires Being Bold: Integrating Education and the Workforce for a Bright Texas Future: The Tri-Agency Report to the Office of the Governor from the Texas Education Agency, Texas Higher Education Coordinating Board, and Texas Workforce Commission, November 2016*
- *60x30TX: Texas Higher Education Strategic Plan, 2015–2030*
- *Creating a New Vision for Public Education in Texas: A Work in Progress for Conversation and Further Development*
- *2016 Comprehensive Biennial Report on Texas Public Schools: A Report to the 85th Legislature from the Texas Education Agency, March 2017*
- Texas Academic Performance Indicator Reports (data)
- Enrollment in Texas public schools (data)
- Secondary school completion and dropouts (data)
- College admissions testing results (data)
- November 17, 2015, State Board of Education (SBOE) learning roundtable: Educating the digital generation
- September 12, 2016, SBOE learning roundtable: Educating the children of poverty
- SBOE Long-Range Plan for Public Education: Region One Educator Forums, December 14, 2014, and January 16, 2015

TXCC team members studied each of these reports and data sources, produced summaries of those reports that the team deemed most germane to the work of the LRP Steering Committee, and created the matrix on the following page, which steering committee members used to inform their selection of topics to be addressed the Long-Range Plan.

TEA Goals in Strategic Plan 2017–2021	TEA Strategic Plan	Long-Range Plan for Technology 2006–2020 and 2016 Report	Tri-Agency Report	GOx30TX Higher Education	Public Visioning Institute	2016 Comprehensive Biennial Report (Information and Data)	Texas Academic Performance Indicator Reports (Data)	Enrollment in Texas Public Schools (Data)	Secondary School Completion and Dropouts (Data)	College Admissions Testing Results (Data)	Region One SBOE Long-Range Plan Educator Forums
1. Recruiting, Supporting, and Retaining Teachers and Principals	●	● (Educator Preparation and Development)	● (under Prime Recommendation 2, #3)				● (Staff Information, including Teacher Turnover Rate)				
2. Improving Transparency of District and Campus Academic and Financial Performance	●		● (under Prime Recommendation 2, #2)		● (Principal IV)	● (Chapter 7, District and Campus Performance)					
3. Building a Foundation of Literacy and Numeracy	●		● (under Prime Recommendation 2, #1)			● (Chapter 2, Student Performance)	● (Student Proficiency Levels)				● (Summary: Early Learning Focus)
4. Improving Low-Performing Schools	●				● (Principal IV)	● (Chapter 7, District and Campus Performance)					
5. Connecting High School to Career and College	●		● (under Prime Recommendations 1 and 3)	● (under Overarching Goal, Second Goal)		● (Chapter 16, Foundation High School Program Endorsements)	● (Advanced Course, Dual Credit Course Completion; AP/IB, SAT/ACT)			● (SAT and ACT Participation and Performance Data)	● (Summary: CCR, Workforce, 21st Century Skills)
6. Using Taxpayer Resources Efficiently	●					● (Chapter 12, Agency Funds and Expenditures)					● (Summary: Early Learning Funding Concerns)
From Supplemental Schedule A											
Goal 1: Provide Education System, Leadership, Guidance, and Resources											
Objective 1.1: Public Education Excellence	●					● (Chapter 12, Graduates and Dropouts)	● (Graduation Rates, Dropout Rates, Attendance Rates)				
Objective 1.2: Academic Excellence	●					● (Chapter 2, Student Performance)	● (Student Proficiency, Dual Credit Course Completion, AP/IB, CTE Enrollments)	● (Enrollment by Grade, CTE)			

TEA Goals in Strategic Plan 2017-2021	TEA Strategic Plan	Long-Range Plan for Technology 2006-2020 and 2016 Report	Tri-Agency Report	60x30TX Higher Education	Public Visioning Institute	2016 Comprehensive Biennial Report (Information and Data)	Texas Academic Performance Indicator Reports (Data)	Enrollment in Texas Public Schools (Data)	Secondary School Completion and Dropouts (Data)	College Admissions Testing Results (Data)	Region One SBOE Long-Range Plan Educator Forums
Goal 2: Provide System Oversight and Support											
Objective 2.1: Accountability	●					● (District and Campus Performance)	● (Student Proficiency, SAT/ACT)			● (SAT/ACT)	
Objective 2.2: Effective School Environments	●					● (Students in DAEPs)					
Objective 2.3: Educator Recruitment, Retention, and Support	●						● (Teacher Turnover Rates)				
Note: Information from data reports is a sample of what is included and is not completely crosswalked to all of the Outcome, Output, and Efficiency Measures in the TEA Strategic Plan. Other Goals not in the TEA Strategic Plan (bold is where it appears as a major goal)											
Identify Education and Employment Opportunities for Texas Veterans			● (Prime Recommendation 4)								
60 Percent of the 24-34-Year-Old Texas Population Will Hold a Certificate or Degree by 2030				● (Overarching Goal)							
Higher Education Degree Completion				● (Second Goal)							
Marketable Skills for High School and Higher Education Graduates			● (Prime Recommendation 3)	● (Third Goal)							
Student Loan Debt not Exceeding 60 Percent of First-Year Wages for Graduates of Texas Public Institutions; Affordable Education			● (Prime Recommendation 3, a)	● (Fourth Goal)							

TEA Goals In Strategic Plan 2017–2021	TEA Strategic Plan	Long-Range Plan for Technology 2006–2020 and 2016 Report	Tri-Agency Report	60x30TX Higher Education	Public Visioning Institute	2016 Comprehensive Biennial Report (Information and Data)	Texas Academic Performance Indicator Reports (Data)	Enrollment in Texas Public Schools (Data)	Secondary School Completion and Dropouts (Data)	College Admissions Testing Results (Data)	Region One SBOE Long-Range Plan Educator Forums
Digital Learning for Students		● (Teaching and Learning)			● (Principal I)						
New Learning Standards					● (Principal II)						
Assessments for Learning					● (Principal III)						
Organizational Transformation					● (Principal V)						
More Balanced and Reinvigorated State and Local Partnership					● (Principal VI)						
Technology for Leadership, Administration, and Instructional Support		● (Leadership, Administration, and Instructional Support)									
Technology infrastructure		● (Infrastructure)									

Appendix D. *2018-2023 Long-Range Plan for Technology*

Building a Stronger Texas



Transforming Education through Technology

Long-Range Plan for Technology 2018-2023

September 2018

Letter from the Deputy Commissioner of Technology – Melody Parrish

September 2018

TO MEMBERS OF THE LEGISLATURE AND THE CITIZENS OF TEXAS:

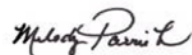
Technology has dramatically shaped our society and is an integral part of all facets of daily life. Over the last decade, efforts to implement and utilize technology in the classroom have transformed education. Federal, state, and local governments have allocated billions of dollars in funding through programs such as E-rate to aid and support schools in the process of integrating technology into the classroom as research shows the impact technology has on academic performance. Therefore, technology must play a significant role in preparing all public-school students in the state for success in college, a career, or the military.

To begin the process of updating the Long-Range Plan for Technology (LRPT), TEA convened an advisory group made up of 15 stakeholders to provide feedback on the current and anticipated technology needs of Texas schools, and to provide feedback on the current LRPT. What we heard was a resounding call to make a fundamental shift in the form and usability of the LRPT. The advisory committee recommended that as a group we collaboratively create a well-organized and useful technology plan to guide local education agencies (LEAs) on technology, a plan that is concise and easy to use, one that they can utilize to develop their own technology plans. Based on input received from the advisory committee, the updated LRPT focuses on six strategic goals. Additional stakeholder input was obtained via survey to collect feedback on technologies that support the strategic goals and to collect examples where LEAs have innovative projects that exemplify these goals.

Technology is dynamic and constantly changing, requiring ongoing monitoring and updating to maximize its effectiveness. It requires IT leaders to be cost-efficient, innovative, and responsive, providing access anytime and anywhere while protecting information resources. TEA will be hosting webinars so all LEAs can learn more about the best practices that are happening across the state.

The goal in updating the LRPT is to provide information on how these six strategic goals can assist LEAs in their strategic planning for their organizations and collaboratively work together based on their individual needs. As technology continuously changes, TEA is committed to updating the LRPT every two years to stay current with emerging trends and changing priorities. On behalf of TEA, I am proud to present the 2018-2023 Long-Range Plan for Technology.

Sincerely,



Melody Parrish
Deputy Commissioner, Technology
Office of Information Technology Services
Texas Education Agency

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ABOUT THIS PLAN

Texas Education Code Sec. 32.001 states State Board of Education is required to develop a long-range plan for technology. This plan identifies technology goals for education over the next five years and guides local education agencies (LEAs) as they develop their individual technology plans. Note: For the purposes of this report, the term “local education agency” is used to indicate school districts and charter schools. The 2018–2023 Long-Range Plan for Technology is available on TEA’s website at www.tea.texas.gov.

Texas Education Agency • 1701 N. Congress, Austin, TX 78701 • 512-463-9734

Overview

Information technology has allowed business, government, and schools to perform more efficiently, and it is no surprise that the next generation of Texans has come to expect technology not only to be present in every aspect of life, but to enhance and significantly improve every day experiences. Traditional ways of delivering education are being upgraded and improved with innovative and flexible learning opportunities. Real-time information and communications are available at your fingertips and, if properly implemented, can enhance, and improve education in Texas. Educators and technology leaders must collaborate to ensure technology initiatives align with overall organizational priorities to create a quality, safe, flexible learning environment for all students.

The Texas Education Agency convened 15 education technology leaders from local education agencies (LEAs), education service centers (ESCs), and technology organizations to form the 2018 Long-Range Plan for Technology (LRPT) Advisory Committee. This group was tasked with identifying the technology strategies and goals to positively enhance and improve education in Texas. The committee was asked to:

- Review and provide feedback on existing long-range strategic plans and best practices
- Explore current and anticipated technology trends, drivers, and potential impact on education in Texas
- Craft a 5-year vision for the information technology environment for education in Texas
- Identify and prioritize technical issues to be addressed to achieve the vision.

As identified in the *Long-Range plan for Public Education 2018*, Texans want a system of public education that is equitable, accessible, and staffed by skilled educators and that offers opportunities for students that will carry them through school and into college, careers, or the military. Today's students will be tomorrow's citizens and workforce, so ensuring that our young people are well educated is critical for the state to have a stronger future. An effective education system is key to equipping students with the knowledge, skills, and integrity to contribute to our state in positive ways. Technology is a driving force for transforming education as we know it, creating stronger, better-educated students, and ultimately building a stronger Texas.

Mission of the Texas Education Agency

The Texas Education Agency works to improve outcomes for all public school students in the state by providing leadership, guidance, and support to school systems. We are working towards a vision in which every child in Texas is an independent thinker and graduates prepared for success in college, a career, or the military, and as an engaged, productive citizen. To achieve this vision for public education in Texas, the Agency has outlined specific strategic priorities to guide and focus our work on behalf of the more than five million school children in our state.



TEA Agency Strategic Plan 2019-2023, adopted June 8, 2018

Technology can be used inside and outside the classroom to improve education and help meet the strategic goals of education statewide. It provides the tools and devices that may be used to solve real-world problems and is a driving force and enabler that can transform the learning experience. Technology can be used to support teachers and educators as well as open many new learning opportunities for all students.

Strategic Goals

The 2018-2023 Long-Range Plan for Technology presents technology trends identified by education technology leaders to positively enhance and improve education in Texas. This plan is intended to be a visionary guide to inform and influence LEAs in developing their own strategic technology plan. The LRPT Advisory Committee has developed six strategic goals and 18 focus areas that represent the technology trends and priorities in education. Each LEA should carefully consider how the six strategic goals outlined in this plan align with their own agency objectives and ensure positive progress is being made in each focus area.

Local education agencies are diverse and unique, and while they may share a great deal of common challenges like budget constraints, competing priorities, and security threats, each technology plan should be tailored to the individual needs, opportunities, and constraints of that LEA. While competing priorities and budget constraints may be a factor in how each LEA chooses to address these goals, it is important for each LEA to prioritize these the goals and focus areas in their technology plans based on their maturity, needs, and budget.

This plan follows the format of the DIR 2018-2022 State Strategic Plan for Information Resource Management and incorporates statewide trends in technology that can be utilized to enhance education in Texas. In a constantly changing technology environment, agencies must be cost efficient, yet innovative; measured, yet responsive; operational, yet strategic and visionary.



**Personalized, Flexible, Empowered
Learning Environment**



STRATEGIC GOAL 1

Implementing a successful personalized learning practice requires a whole new way of thinking about education.

Imagine an education system where students move at their own pace, have the freedom to make decisions about their own learning, and adapt lessons to their own interests, abilities, and style. A system where students are engaged and motivated, and progress is inherently assessed along the way.

Students no longer need to be bound by the traditional classroom space or by traditional learning methods. Data can be used to present the right lessons at the time most needed.

Focus Areas:

1. Student-Centered & Adaptive
2. Reimagined Learning Spaces
3. Data-Driven Decisions

Student-Centered & Adaptive

Focusing on the needs and interests of the student

Adaptive technology may be one of the largest innovations of digital learning in the 21st century. LEAs should consider implementing a student-centered and adaptable learning practice.

Challenge

Personalized learning is a relatively new pedagogy and has many potential unknowns. Technology can be an enabler of personalized learning, but it cannot be implemented in a vacuum. While many educators strive for a successful personalized learning environment, some are unsure how to implement it in a scalable and repeatable manner across all classrooms and campuses.

Actions

- Create** a strategic implementation plan that addresses the shift in teaching methods, including changes to structures, policies, technology, and supports to facilitate innovation in schools.
- Collaborate** and involve all stakeholders including school boards, educators, administrators, teachers, students, and parents. Include functions like technology, professional development, and curriculum and instruction.
- Utilize** existing proven models. Learn from existing projects and studies. Be iterative, allow for corrections, and adapt as necessary to fit each environment.
- Model** the behavior. Use personalized, adaptive training techniques to instruct teachers and educators. Provide training and coaching on digital literacy and designing engaging lessons.

Outcomes

Short-term: Personalized content tailored for students, allowing individual preferences and choice to enhance more creative and innovative work.

Long-term: Fully prepared, independent-thinking, tech-savvy student population ready for the future.



Innovative Spotlight: A teacher in Region 20 used a digital display to allow students to interactively practice an animal heart dissection before entering the lab to complete the real procedure.

Reimagined Learning Spaces


Flexible online and physical environments for students and educators


The design and layout of a physical classroom can fundamentally change the learning experience for students. Spaces can be designed for student collaboration and autonomy, giving students a choice in what kind of learning space works best for them. With virtual courses, classes can be taken anywhere, lessening the need for physical classrooms.


Challenge

Classrooms have looked essentially the same for 80 years. As personalized, flexible curriculum becomes the norm, the traditional setting does not allow for the collaboration, movement, and autonomy needed for an open curriculum.

Actions

 **Redesign** classrooms to create active learning spaces, suited to different types of learning. Create collaboration areas, project spaces, maker-spaces, and choices for how to interact. Use buildings differently. Ensure appropriate power, connectivity, and technology resources are available.

 **Use** online curriculum like the Texas Virtual School Network (TXVSN) and open educational resources (OER) to enhance everyday classroom instruction and to facilitate newer models like flipped classrooms, blended learning, 24/7 learning, and alternative schedules.

 **Enable** student agency by allowing students to take an active role as the lead agent in making learning decisions about the physical and online environment that works best for them.

Outcomes

Short-term: Intentionally designed, positive, flexible learning spaces with technology seamlessly integrated into the design.

Long-term: Flexible, open learning environments that foster creativity and encourage innovation for all students.



Innovative Spotlight: A district in Region 6 has provided large scale maker-spaces in most libraries, which allow students to create and to critically think about their own projects.

Data-Driven Decisions


Choices based on comprehensive information


Vast amounts of structured and unstructured data have transformed the way organizations make decisions. From designing lesson options to determining which students need additional assistance, data-driven decision making can help schools fulfill their missions.


Challenge

While analytics can benefit an organization, the tools and strategies are rendered useless without proper data management and governance. The amount of data can be overwhelming and unruly if not properly managed and used.

Actions

 **Collect** important and useful data through a student information system (SIS) and other data warehouse systems (like the Texas Student Data System (TSDS)). Use technology to make the data more available in various formats.

 **Provide** robust, real-time data with relevant actionable information. Online testing and student data warehouses can make information available more efficiently and effectively, allowing teachers more time with students and enabling them to make immediate course corrections.

 **Create** a strategic plan for data use. Identify the high-quality and relevant information and document how/when it will be used. Provide professional development for teachers and staff to be able to effectively obtain and utilize the data to drive educational decisions.

Outcomes

Short-term: Greater insight for data-driven decisions and identifying areas for improvement.

Long-term: Efficient use of time, resources, and improved instruction to students through informed decisions and increased data quality throughout the organization.



Innovative Spotlight: A district in Region 19 is using their robust data management system to identify struggling students that need extra time with the teacher.

Equitable Access



STRATEGIC GOAL 2

Preparing all students for success in the 21st century and ensuring that all students have the technology skills to fully participate and thrive in the world is a top concern of all educators.

Technology provides opportunities to transform education, but only if all students can fully participate. When implementing technology, it is important to consider not only the number and type of technology devices you need but also how to connect them, how to use them, and how to leverage available digital resources to meet learning and teaching goals.

Focus Areas:

1. One-to-One (1:1) Initiative
2. Connectivity
3. Usability

One-to-One (1:1) Initiative

Providing each student and staff with a connected device

Educators are constantly seeking to find new opportunities and methods to improve the student learning experience and to better prepare students for the future. One trend that has become mainstream is providing a one-to-one ratio of device to student and staff.

Challenge

Funding may be a significant hurdle in implementing a 1:1 initiative; moreover, providing the devices is not sufficient to ensure a successful outcome. Without a comprehensive paradigm-shifting implementation strategy, personal devices just become overrated note-taking and testing devices.

Actions

Identify funding to implement a 1:1 initiative. Look for innovative and creative funding sources if traditional budget is not available.

Set student device standards for learning, for access, and for the device itself (i.e. should have a screen size that supports state testing and should have consequences for poor device care).

Create a strategic implementation plan to address the shift in teaching methods. Train teachers and staff appropriately. Monitor and assess frequently and adjust.

Involve stakeholders early and often: school board members, education leaders, teachers, parents, students, and the community.

Outcomes

Short-term: Personalized content tailored for students to enhance technology skills and to foster more creative and innovative work.

Long-term: Fully prepared, independent-thinking, tech-savvy student population ready to tackle any challenge in the future.



Innovative Spotlight Through grants and private donors, a district in Region 9 has acquired devices that accommodate course work for each student's level. Elementary students are assigned chrome books, junior high students are assigned classroom laptops, and high school students taking collegiate courses are assigned Mac laptops.

9

Connectivity

Ability to connect and communicate with another computer or the internet.


Preparing students for success requires an environment capable of supporting new ways of teaching/learning and providing universal access to the technology. High-speed broadband access is an essential requirement in transforming digital learning experiences.


Challenge

Students are learning the skills of tomorrow using slow connections, and unreliable networks, or no connectivity at all. Some students have minimal or no access at home and are unable to take advantage of distance learning, digital homework, student-to-teacher communications, flipped classrooms, and other learning opportunities.

Actions

 **Extend** fiber and wi-fi connections that meet or exceed the State Education Technology Directors Association's (SETDA) recommendation of 1Gb internet capacity per 1000 students.

 **Bring** down connectivity costs through competitive bids, group negotiations, and the E-rate program.

 **Find** programs to help provide high-speed connectivity at school and at home for all students, including those that cannot afford high-speed access. Conduct surveys to learn what is needed.

Outcomes

Short-term: A robust, resilient infrastructure, resulting in faster access to applications and increased productivity.

Long-term: Seamless 24/7 access to instructional resources that are affordable and scalable for all students.



Innovative Spotlight A district in Region 5 developed an Early College High School program that provides students with take-home laptops with built-in cell data service through a grant from TEA to provide students with continuous access to learning resources.



Innovative Spotlight A district in Region 11 participates in the Sprint 1 Million Project and offers free home internet access to 9-12 grade students who cannot afford broadband.

Usability


Making technology easier to use


Many diverse devices and technologies are available to enhance learning opportunities. Each device and technology may come with unique requirements for understanding how to utilize and get the most from the experience.


Challenge

While having available devices and connectivity are part of the goal, these resources are useless if the student and educators are not able or do not know how to use the technology tools. While some individuals may be tech savvy from their own personal use and interests, not all students and staff have had those same opportunities.

Actions

 **Ensure** students, teachers, and staff know how to use the technology tools and devices. Include instructions and training when devices are issued.

 **Identify** how to get help when needed. Make sure help desk staff, phone numbers, and links to help are readily available.

 **Accommodate** diverse learners and those with special instructional needs.

Outcomes

Short-term: Improved user experience when interacting with a device or technology.

Long-term: All technical barriers removed, allowing staff and students to focus on learning experiences and new ways to design, create, and grow.



Innovative Spotlight A district in Region 7 provides special needs students with devices to enable them to use technology despite handicapping conditions.

Digital Citizenship



STRATEGIC GOAL 3

As digital resources become more prevalent so does the need for greater digital responsibility.

Each student must become aware of their own ability to make effective choices and the impact that has on the world around them and for themselves in reaching their full potential.

Educators and parents have a joint responsibility in teaching the components of respect, education, and protection in a digital world.

Focus Areas:

1. Program Development
2. Content Development
3. Rights and Responsibilities

Program Development

Formulating, improving, and expanding an ongoing educational plan

Technology is prevalent throughout students' lives, and with those digital resources comes the responsibility to be a good digital citizen in and out of school.

Challenge

Students face challenges when using social media and going online. Students see and hear mixed messages from parents, teachers, and other students about what are acceptable uses of technology. Technology is constantly changing, and educators struggle to know if digital citizen campaigns are effective.

Actions

- Establish** responsible digital citizen standards and expectations. Share this with all students, staff, and parents.
- Measure** the outcomes of the program periodically. Evaluate whether the awareness campaign is effective.
- Update** as technology changes. Keep training and awareness campaigns up to date and relevant.
- Find** a balance between responsibility and protection (encourage responsible use as opposed to restricting use).

Outcomes

Short-term: Well-defined awareness program that prepares students, staff, and parents for responsible digital citizenship.

Long-term: A knowledgeable society that takes responsibility for digital actions, behaviors, and consequences.



Innovative Spotlight: A district in Region 13 has students and staff develop customized digital citizenship plans for each high school. Many utilize campus student groups, broadcasting announcements and emailing the student body tips on online security and awareness.

Content Development


Determining how to teach digital citizenship


As students master the educational curriculum in the quest to become successful and productive adults, they must also learn the norms of appropriate, responsible behavior online.


Challenge


Most students are eager to dive into technology and social media, and sometimes find out later that mistakes can be very damaging, with a digital footprint that follows them forever. Responsible digital citizenship should be taught hand in hand with the increasing use of technology in the classroom.

Actions

 **Utilize** existing training and awareness resources. Use online training modules, quizzes, and assessments to engage students.

 **Incorporate** into curriculum. Allow students to practice responsible digital citizenship in assignments, lessons, and homework.

 **Start** early and be consistent with a digital citizenship program. Start as early as kindergarten and continue through graduation.

 **Model** the behavior. Encourage staff, teachers, and parents to lead by example in showcasing responsible digital practices.

Outcomes

Short-term: Positive school culture that supports safe and responsible technology use.

Long-term: Fully prepared, responsible, tech savvy student population ready to tackle any challenge in the future.



Innovative Spotlight: A district in Region 6 trains students on digital citizenship using customizable Open Educational Resources which are modified and enhanced to meet the specific training needs of individuals.

Rights and Responsibilities


Accountability for digital privileges

Students use computers or devices every day in their personal lives or in school. It is essential that students are prepared to communicate and collaborate online in a safe and responsible manner. Students, parents, and staff should be aware of their rights and responsibilities and understand the consequences when rights are abused.


Challenge

Students get mixed messages about what is acceptable, and some students may get no guidance from parents. LEAs are not the sole responsible party for teaching digital rights and responsibilities, but they should be leading the way in establishing a solid foundation.


Actions

 **Respect** students, staff, and devices. Include guidelines in your digital citizenship program that address respect:

- digital etiquette (standards of conduct)
- digital access (equal participation)
- digital law (responsibility for actions)

 **Educate** and connect with others. Include guidelines in your digital citizenship program that address education:

- digital literacy (use of technology)
- digital communication (exchange of info)
- digital commerce (buying/selling goods)

 **Protect** students and staff. Include guidelines in your digital citizenship program that address protection:

- digital rights (universal freedoms)
- digital security (electronic precautions)
- digital health and wellness (physical and emotional welfare)

Outcomes

Short-term: Engaged users operating safely, responsibly, and respectfully online.

Long-term: Digitally responsible society fully participating in the online world in which we live.



Innovative Spotlight: Junior high students in Region 7 create shareable posters and other content to highlight their understanding of digital citizenship.

Safety & Security



STRATEGIC GOAL 4

The safety of every student on every campus is a top priority for everyone in Texas. School safety continues to be in the forefront of the discussion and encompasses many issues and strategies to better prepare and protect students and staff.

LEAs are obligated to provide secure and reliable information and services to both the students they serve and the workforce they support. The amount of information created and stored is growing exponentially. As the need to provide access to information grows, the public sector continues to be an attractive target for cybersecurity attacks.

Focus Areas:

1. Cybersecurity
2. Campus Safety
3. Data Management & Governance

Cybersecurity

Securing and protecting student and organization information

LEAs are trusted with the most sensitive and confidential student and staff data and are responsible for ensuring information is not compromised. LEAs must protect data and ensure it is used appropriately.

Challenge

Increasing sophistication of threats, limited availability of security professionals, and the potential catastrophic impact of breaches have kept cybersecurity in the spotlight across the nation. Competition for skilled professionals and limited resources have placed a burden on the public sector’s ability to address these issues. LEAs should be strategic in their approach to cybersecurity to compensate for any technological or professional shortfalls.

Actions

- Assess** risks based on industry standards and prioritize cybersecurity resources to address the greatest risks, including risks to student data privacy.
- Develop** and adhere to a software currency policy that reduces the use of unsupported software and decreases security vulnerabilities. Include standards, policies, and restrictions for open-source or free software.
- Leverage** the organization’s information security plan and security assessments to obtain executive sponsorship for cybersecurity initiatives and to advocate for cybersecurity focus.

Outcomes

Short-term: Adequate resources to effectively manage the security program and reduced risk and vulnerability of the organization’s information systems.

Long-term: Continued protection of private and confidential information, minimized exposure to cyberattacks, and a mature risk-based security program.



Innovative Spotlight: A district in Region 7 provides cybersecurity training to all staff and subsequently tests their understanding through phishing emails. Those that fail to recognize the phishing attempt are required to retake the training.

Campus Safety




Securing the physical environment

School safety remains a top concern for educators. Each LEA has a school safety plan, and technology has a significant role to play in school safety and protection.

Challenge

Individuals cannot function efficiently when their basic needs like safety and security are not met. Safety challenges continue to grow, and unforeseen threats can surface at any time.

Actions

-  **Align** your school safety plan with the [Governor's School and Firearm Safety Action Plan](#).
-  **Take** advantage of the resources available at the [Texas School Safety Center](#).
-  **Use** technology to enhance scalability, reliability, and innovation within safety solutions. Update plans to include availability, maintenance, and guidelines for media storage (like video files, etc.).

Outcomes

Short-term: A robust set of tools that enhances the everyday environment and improves safety.

Long-term: School campuses free of risk or harm that are safe for students and staff.



Innovative Spotlight A district in Region 1 implemented an Anonymous Incident Management Reporting system that allows students to report inappropriate behavior anonymously via mobile app, web, or phone allowing incidents to be addressed early on prior to escalating.



Innovative Spotlight A district in Region 10 implemented a district-wide surveillance system to monitor inappropriate behavior and address issues of student and staff safety.

Data Management & Governance




Strategies that put organizations in control of their business data

Data can be one of an organization's most valuable assets, or a major hindrance if not managed appropriately. The exponential increase in data has created both challenges and opportunities for organizations. To benefit from this vast amount of data, organizations need to implement fundamental data management, governance, policies, and best practices.

Challenge

As volumes of data increase, so do the challenges that LEAs face when managing that data. Data may exist within departments, programs, or even under the ownership of individual people, and without clear data retention and storage practices, it can be costly. Often organizations do not have a complete picture of their existing data, making it difficult to develop and adhere to a master data management plan. Organizations will be unable to fully realize the potential of their data without implementing proper data management practices.

Actions

-  **Develop** data governance groups to ensure the appropriate individuals are engaged in data-related decisions.
-  **Leverage** existing data management frameworks as a resource for developing a mature data management program, where all data is classified based on risk. Include protections for ensuring student data privacy.
-  **Appoint** an individual dedicated to managing and maintaining the organization's data.

Outcomes

Short-term: Better understanding of the type, location, volume, and ownership of data retained by the agency.

Long-term: Improved business decisions, reduced costs, and the ability to automate processes.



Innovative Spotlight A district in Region 11 was awarded the Trusted Learning Environment Seal and participated in the development of the Data Privacy Agreement approved by the Texas K-12 CTO Council.

Collaborative Leadership



STRATEGIC GOAL 5

With so many challenges facing organizations and so many priorities competing for resources, educators need to find ways to do more with less and to work smarter, not harder.

Given the existing budget and resource constraints, LEAs must prioritize their goals, have a clear, unified vision for achieving those goals, and look for collaborative, cost-effective solutions. Having all stakeholders on board is critical to accomplishing the most with resources available.

Focus Areas:

1. Strategic Planning
2. Shared Services
3. State Collaboration

Strategic Planning

Setting priorities and ensuring stakeholders are working towards common goals

Effective use of technology requires collaboration between teams to ensure that the technology is solving critical issues. Technology cannot be effective if implemented in a vacuum. Groups must come together to plan how technology will be implemented to enhance the curriculum and improve the learning experience.

Challenge

LEAs have many priorities that compete for resources. Organizations may have multiple plans i.e., strategic plans, curriculum plans, campus improvement plans, and technology plans. This can lead to silos and lack of ownership (i.e. curriculum staff may not take ownership of technology plan). Leadership groups should work together to ensure that all departments have ownership in a clear, unified vision.

Actions

- Involve** key stakeholders, including school boards, education leaders, administrators, teachers, students, and parents. Consider all aspects in one plan including technology, curriculum, instruction, and professional development.
- Plan** effectively by having a clear vision and incorporating technology in appropriate areas. Ensure stakeholders have ownership. Incorporate compliance requirements in the plan with budget and staffing needs.
- Evaluate** effectiveness and make improvements as needed. Measure often to see if goals are being met.

Outcomes

Short-term: A clear set of priorities and actions to direct resources and ensure that all stakeholders are working towards common goals.

Long-term: Proactive, efficient organization working together to achieve vision and optimize costs.



Innovative Spotlight: Multiple districts have created Technology Committees comprised of students, teachers, parents, technology coordinators, and administrative staff. The committees discuss best practices for integrating technology into the classroom, address technology needs and concerns, and provide guidance on technology

Shared Services




Expanding IT services within and among organizations according to similar needs

Shared services allow for agencies to focus limited resources on IT applications and supported business functions. This allows for improved operational efficiency, optimized delivery services, cost savings, and harmonized operations.

Challenge

Implementing a shared services model can be a difficult task. LEAs continue to face challenges around operational governance and staffing for system maintenance. However, with appropriate governance and engagement, organizations can maintain a high level of visibility and control over their service delivery.

Actions

-  **Reach** out to education service centers and other organizations to leverage existing shared services and explore ideas for new models to create additional cost savings.
-  **Develop** shared service models based on business values to create a more consistent IT landscape.
-  **Obtain** executive support for IT governance needed to continually develop and deploy shared services solutions.

Outcomes

Short-term: Cost savings and a focus on improved customer relations.

Long-term: Better usage of IT as a service, enabling IT leaders to focus on mission rather than directly managing administrative services.



Innovative Spotlight Twelve ESCs formed a consortium to hire a shared Information Security Officer (ISO). The new position serves the security interests of the twelve ESC regions, and the costs are shared.



Innovative Spotlight In Region 19, rural districts are sharing resources (human, fiscal, technology, etc.) to deliver training, host classes, and offer extended learning opportunities for school district staff, students, and community members for both credit and non-credit purposes.

State Collaboration




Working together with State Leadership to achieve success

LEAs and state education leadership have the same goal for education in Texas – that every child in Texas will be an independent thinker and graduate prepared for success in college, a career, or the military, and will become an engaged, productive citizen. Communication and collaboration between LEAs and state leadership is crucial to establishing a technology direction and vision and supporting one another in reaching these goals.

Challenge

LEAs may not have a clear understanding of the vision or goals of their oversight agencies and cannot plan appropriately if the vision is unclear. LEAs may not be aware of resources that are available to tackle technology challenges that all LEAs face.

Actions

-  **Strengthen** relationships with state leadership. Keep conversations flowing in both directions. Take opportunities to better understand and develop technology direction and vision.
-  **Participate** in advisory committees for technology, security, etc. These groups present an opportunity to provide input, share concerns and take ownership in the outcomes.
-  **Learn** from others' successes. Share successful, innovative projects with other LEAs. Stay abreast of the resources available from the state that may enhance or benefit LEA projects.

Outcomes

Short-term: Work more effectively with others towards a common goal.

Long-term: Better results, greater innovation, and higher productivity.



Innovative Spotlight The Data Security Advisory Committee (DSAC) provides guidance to Texas education communities, maximizing collaboration and communication regarding information security issues and resources. The DSAC is comprised of representatives from school districts, ESCs, TEA, and the private sector.

Reliable Infrastructure



STRATEGIC GOAL 6

LEAs are facing the challenge of modernizing legacy hardware and software, replacing aging systems to move toward a more collaborative, agile, and interoperable education system.

As LEAs transition from traditional practices to innovative solutions, they need to evaluate current and ongoing investments in legacy systems and hardware while considering replacement with more efficient and scalable options.

As more and more learning opportunities rely on technology to enhance educational experiences, a reliable infrastructure is critical for LEAs to obtain their educational goals. Determining what equipment and support is needed, by whom, and how to get there may not be easy, but it is essential to the future success of educational IT.

Focus Areas:

1. Technical Support
2. Legacy Modernization
3. Continuity of Operations

Technology Support

Assistance and services for technology users

Technology can be one of a LEA's most valuable assets, but it presents many challenges as well. Technology continues to expand and become embedded in the curriculum, communications, delivery methods, and learning environments. Being able to support the technology and keep it current and functioning is critical to success. To benefit from this vast amount of pervasive technology, LEAs need a well-organized and well-supported technology support structure.

Challenge

LEAs can underestimate their tech support needs and end up wasting valuable education time. Technology devices require constant updates and maintenance. Outdated devices and software can become a serious risk.

Actions

Develop proportional tech support teams to address the inevitable issues that arise with networks, laptops, and devices. Target a goal of a 1-to-350 ratio of tech support staff to devices. Implement a help desk to standardize intake, track workload, and automate functions where appropriate.

Redesign learning spaces to keep power and connectivity readily available and minimize downtime.

Invest in professional development for technology support staff to stay current with expertise, trends, and risks. Use online resources in addition to traditional training. Target a minimum of at least 80 hours a year per staff member on technical training.

Address technology staff salaries to be competitive with industry standards to be able to hire and retain qualified staff

Outcomes

Short-term: Better student and teacher interaction and experience with technology, with more time focused on learning.

Long-term: A qualified, competent workforce to manage the technical complexities for increased organizational effectiveness.

Legacy Modernization


Addressing outdated technology, computer systems, or applications


A legacy system operates with old, obsolete, insecure, or inefficient hardware or software. The world is moving towards the adoption of new technologies at a fast pace, driven by promises of agility and operational efficiency. As LEAs transition from old IT infrastructure, legacy modernization remains a challenge that requires prioritizing operational and security risks.


Challenge

Legacy systems are more difficult and expensive to maintain and carry more security risks. Many core functions and classrooms rely on them, but migrating functions to updated, secure systems can be costly. Even with a statewide modernization effort underway, it will continue to take prioritization, planning, time, and sufficient resources to resolve these issues.

Actions

 **Evaluate** software-as-a-service (SaaS) and commercial-off-the-shelf (COTS) solutions before building custom applications.

 **Utilize** an application portfolio management solution to accurately inventory applications and the resources required to provide operational support of those applications over their lifetimes.

 **Develop** standards for refresh and replacement, and create guidelines to determine the appropriate course of action to take regarding outdated applications and devices.

Outcomes

Short-term: Repeatable, adaptable methodologies to standardize and prioritize legacy modernization and reduced risk of system and data breaches.

Long-term: A proactive approach for managing IT, shifting focus to emerging technologies, reduced future costs, improved security, and better application efficiency.



Innovative Spotlight: A district in Region 5 moved to a virtualized server environment that is redundant across several servers and backed up both onsite and off.

Continuity of Operations


Preparing for continued operations during and after an emergency


LEAs should prepare to restore critical instructional and administrative resources in the face of a disaster or the disruption of services. Business continuity planning is crucial to the recovery of technology assets and resuming mission-critical functions.


Challenge

While there is no regulation or mandate requiring a LEA to have a business continuity plan, best practice and common sense indicate that a plan is critical to recovery. Existing plans are not periodically tested and sometimes neglect to incorporate interdependent relationships regarding IT infrastructure (i.e. with external vendors, cloud, or SaaS). With the threat of natural disasters always looming, business operations in Texas schools remain vulnerable to disruption.

Actions

 **Test** and improve business continuity plans routinely to optimize effectiveness, including an annual exercise of continuity plans.

 **Consider** cloud infrastructure as a mechanism for business continuity and disaster recovery from diverse locations.

 **Formalize** alternate worksite policies to improve the continuity of operations, ensuring organizations enable appropriate controls for telework options.

Outcomes

Short-term: The identification and prioritization of the critical personnel, facilities, and resources required to continue delivery of necessary functions after an emergency.

Long-term: A holistic approach to incident management that includes collaboration and standard command and control management structures.



Innovative Spotlight: A district in Region 16 implemented a remote DR facility where development, test, and training environments are maintained and can serve as a failover site to ensure operational ability.

Looking to the Future – Cost Effective & Collaborative Solutions

As we look towards the future, it is imperative to look for creative solutions and take advantage of opportunities for greater efficiency and effectiveness. The following are a few trends that should be considered for optimizing resources and increasing the value of digital assets.

Cost Optimization – Seek out and negotiate education discounts on hardware and software. Many hardware and software vendors offer special discounts for qualifying education institutions. Use bulk discount programs and state cooperative contracts to leverage statewide purchasing power.

Collaborative Solutions - Take advantage of software-as-a-service (SaaS) and cloud services to minimize implementation, maintenance, and support costs. SaaS is a software model where a third-party provider hosts applications for a license subscription fee and makes them available over the Internet. Cloud services offer alternatives to traditional IT delivery models. Cloud-computing— a model that enables on-demand network access to resources—has changed how business is done. If cloud services are implemented carefully and appropriately, they can ease the burden of aging infrastructure and provide flexible, lower-cost IT service delivery.

Interoperability - Choose software products and learning systems that are flexible when it comes to standards. They should support the prevalent standards of the day and the platform itself should not be rigid or restrictive in only supporting one standard. New standards emerge often, and it can be costly to be stuck with a single standard that may not remain the prevalent standard. Choose software that has the flexibility and agility to effortlessly incorporate new standards that emerge.

Interoperability is the ability of computer systems to connect and communicate with one another seamlessly despite the platform or way it was implemented, allowing easy integration and sharing of data in a format that is understandable to all.

The IMS Global Learning Consortium is a well-known non-profit collaborative organization tasked with advancing edtech interoperability, innovation, and learning impact. Several education technology interoperability standards can be found on their website: <https://www.imsglobal.org/>.

Innovative Spotlights

This section highlights innovative projects LEAs have implemented in alignment with these strategies:

-  A district in region 18 utilized a Technology Lending Grant to purchase devices and MiFi (mobile Wi-Fi) hotspots to create more equitable access.
-  Teachers in Region 1 leverage Google Chromebook and Google Classroom to provide immediate feedback to students. Teachers then adjust the curriculum and personalize the learning for the high and low performers based on academic achievement. All K-12 curriculum is digital and accessible for all teachers which facilitates cross alignments between the course, grade, and campus level throughout the district.
-  A district in Region 3 created a Teacher Technology Team (T3) to help foster collaborative learning with the staff.
-  A district in Region 12 created a STEAM (science, technology, engineering, arts, math) garage to empower students learning in a flexible environment and allowing students to communicate, collaborate, think critically, and engage creatively. The STEAM Garage has a video production studio, computers, 3D printers, tablet devices, robotics, and electronics.
-  A district in Region 8 provides 1:1 iPads. Junior high and high school students take their devices home while elementary students have technology classroom carts.
-  A district in Region 17 created a technology committee consisting of two parents, administration, a teacher from each of the levels, and technology representative.
-  A district in Region 16 implemented a project where students, in teams, collaborate on chapters and write their own textbook using modern technology. The students, over a period of weeks, present the chapters to the larger class and obtain feedback on their work. The students then return to review, edit, and revise their work for the final product.
-  A district in Region 19 provides blended learning for both teachers and students, which has been especially beneficial to geographically distant (rural) campuses. Video meetings are used to provide modeling, training, and coaching with teachers.
-  A district in Region 2 implemented the AVID (Advancement Via Individual Determination) program to encourage college enrollment. The program places special emphasis on the development of writing, critical thinking, teamwork, organization, and reading skills.
-  A district in Region 15 provides training on project-based learning, use of genius hour programs, and design thinking concepts, as well as multi-faceted technology-related professional development to facilitate student-centered, personalized learning in the classroom.
-  A district in Region 4 is changing the learning environment to meet the needs of students by providing flexible furniture and centers that offer learning resources and teacher training, encouraging flexible approaches to the teaching structure.

State and Federal Supports

This section highlights state and federal programs and services available to assist LEAs in striving to implement the technology strategic goals listed in this plan.

E-Rate program, federally funded program to provide schools and libraries affordable access to advanced telecommunications services. This program provides discounts ranging from 20 to 90 percent on telecommunications services, internet access, internal connections, and basic maintenance of internal connections to eligible schools and libraries.

https://tea.texas.gov/Academics/Learning_Support_and_Programs/Technology_Planning/E-rate/

Classroom Connectivity Initiative, a partnership between the Texas Education Agency, regional education service centers and the non-profit EducationSuperHighway. The initiative is designed to increase access to affordable, high-speed broadband and Wi-Fi access for K–12 public schools in Texas. https://tea.texas.gov/Classroom_Connectivity

Department of Information Resources (DIR) Services <https://www.dir.texas.gov/>

- **DIR Shared Technology Services**, which includes data center services, telecom services, purchasing services, and online payment services.
- **Modernization and Development Framework**. DIR provides a modernization strategy with supporting guide (LM Guide), checklist, and application development decision framework (ADDF).
- **Statewide Cybersecurity and Data Coordination**. DIR provides collaboration across state government entities supporting advancement of cybersecurity and data services. Cybersecurity services include the sharing of threat intelligence and managed security services including security device management, incident response services, and assessment services.
- **Bulk Purchase Program** for desktops, laptops, tablets, software, and other IT equipment. DIR coordinates computer bulk purchases to leverage statewide purchasing power.

Texas Gateway and the Texas CTE Resource provide engaging, TEKS-aligned resources for teachers to use with students as part of classroom instruction, intervention, acceleration, or additional practice. <https://www.texasgateway.org> <https://www.txcte.org/>

Texas Virtual School Network (TXVSN) provides Texas students and schools with equitable access to quality online courses and instructors. It is a valuable resource for interactive, collaborative, instructor-led online courses taught by state-certified and appropriately credentialed teachers trained in effective online instruction. <http://www.txvsn.org/>

Technology and Instruction Materials Allotment (IMA) is an allocation of state funds for the purchase of instructional materials, technological equipment, and technology-related services. Each district and open-enrollment charter school receives an allotment each biennium.

TEA Grants like the Technology Lending grant. The purpose of the Technology Lending grant is to provide LEAs the funds to purchase technology devices that are loaned to students for access to digital instructional materials off campus. The grant provides personal student learning devices and internet access for students who would not otherwise have access to digital instructional materials off campus.

Acknowledgements

TEA and SBOE appreciate the valuable input provided by education leaders from local education agencies, education service centers, and technology organizations in the development of the 2018-2023 Long-Range Plan for Technology.

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