

## Strengthening Texas' Economy Begins with Improving Early Math Education

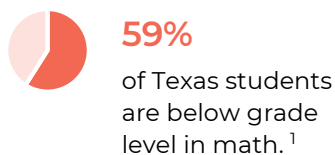
Addressing Low Math Proficiency in Texas Requires Targeted Investment and Commitment



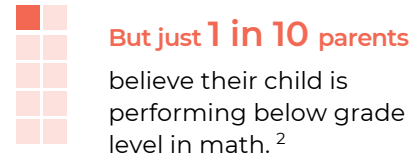
### TEXAS HAS A MATH PROBLEM

Texas students are not demonstrating the level of math achievement needed to be successful in today's – or tomorrow's – economy. Preparing students with math knowledge and skills sets them up for long-term economic success. This competency in mathematics is key to a workforce that can produce innovation and GDP growth in the 21<sup>st</sup> century economy.

Despite efforts in recent years, Texas students continue to struggle with math proficiency.



In every grade, Texas students remain below pre-pandemic math achievement.



The percentage of eighth graders scoring "Proficient" in math has fallen 16 percentage points since 2011, with now less than one-fourth of students scoring "Proficient".<sup>3</sup>

**Only 36%** of elementary and middle school principals in Texas report that all or almost all of their math teachers demonstrate deep knowledge of math instruction, and only 41% have a deep knowledge of math.<sup>4</sup>

### STRONG MATH FOUNDATIONS MATTER

- 1 Foundational math skills subsequently unlock students' ability to meaningfully engage with higher-level STEM coursework.** Employment in science, technology, engineering, and mathematics (STEM) occupations is expected to grow faster than in non-STEM occupations (7% vs. 2%), outpacing total job growth, and will likely be held by workers with higher levels of educational and degree attainment.<sup>5</sup> As the future Texas economy relies on a skilled, qualified STEM workforce, a student's inability to master math in the early grades substantially hinders their access to an increasingly critical and lucrative sector of Texas' economy.
- 2 Students who struggle with math early are unlikely to catch up.** In fact, only 13% of students who were behind in math by 3<sup>rd</sup> grade managed to perform at grade level by 6<sup>th</sup> grade. This demonstrates the urgent need for intervention and support during the early years.
- 3 Weak foundations result in students not being prepared later in life.** With just half of Texas high school graduates meeting college readiness benchmarks in math, many Texas students can be shut out of high wage careers and academic pathways.

<sup>1</sup>[2024 STAAR Results](#)

<sup>2</sup>[B-flation: How Good Grades Can Sideline Parents](#), Learning Heroes (2023)

<sup>3</sup>[NAEP State Profile](#)

<sup>4</sup>RAND. (Feb. 2024). [Elementary and Middle School Opportunity Structures That Factor into Students' Math Learning: Findings from the American Mathematics Educator Study](#)

<sup>5</sup><https://nces.nsf.gov/pubs/nsb20245/u-s-stem-workforce-size-growth-and-employment>

## Texas can address this low math achievement through targeted efforts in early grades to improve math outcomes in Texas schools

The steps the State Legislature takes to address the lack of math readiness in the state will have wide-reaching impact and generational effects for the 1.55 million K-3 students in Texas public schools.<sup>6</sup> As policymakers contemplate ways to improve math education in Texas, it is worth considering options that take a comprehensive approach incorporating students, teachers, and parents to help students succeed.

**Texans don't want to wait so long before focusing on math.**

**79% of Texas voters favor requiring schools to notify parents starting in kindergarten** if their child is not on grade level in math.<sup>7</sup>

## Opportunities to Strengthen Math Education in Texas



### Support Students

**Strengthen early identification & intervention** by ensuring schools utilize evidence-based progress monitoring to detect foundational gaps and ensure teachers are provided data literacy to adequately inform classroom instruction, and provide targeted, research-based support for students to get back on track.

When students are shown to be struggling, **require districts to create targeted interventions tailored to the needs of the student.**

**Scale the Additional Day School Year (ADSY) Program** by reducing the base calendar requirement for eligibility from 180 to 175 days while incentivizing school systems to provide greater numbers of additional days so that more districts are able to implement the program and provide the most extended learning time. The ADSY program should also be **expanded to include middle schools.**



### Support Parents

**Provide parents with reliable information on their student's progress and resources** through strong parent notification requirements when students are shown to be off track on progress monitoring measures.

**Provide resources aligned with state high-quality instructional materials (HQIM)** that parents can use as an element of a student's intervention plan to effectively support at-home learning.



### Support Teachers

**Expand access to high-quality professional development for math teachers**, by scaling or providing appropriate incentives for participation in Math Academies.

**Provide teachers across foundational subjects in reading and math with additional supports – such as instructional coaching** – strategically aligned to HQIM implementation and focused on campuses with the greatest percentage of academically behind students.

## Additional Supporters



EDUCATE TEXAS  
of COMMUNITIES FOUNDATION of TEXAS



GREATER HOUSTON  
PARTNERSHIP



<sup>6</sup> [PEIMS, 2023-2024 Student Enrollment](#)

<sup>7</sup> [2024 Texas 2036 Voter Poll](#)