Building A Foundation of Reading and Math

"Our child lit up when he first realized he could read. As parents, we knew we were going to nurture his spark and love for reading."

– Victor Rivera, Parent
Los Fresnos Consolidated Independent School District

Houston ISD

WHY THIS MATTERS

Building proficiency in reading and math begins with kindergarten readiness, but does not stop there – strong basic reading and math skills have long-term impact on student outcomes. For example, one national study shows that meeting grade level expectations in reading by 3rd grade is tied to a substantially higher likelihood of graduation by age 19.[21] By the time students in Texas complete 8th grade, they must have the foundational skills that will allow them to study advanced topics and gain greater understanding.

90

Ninety percent of **brain development** occurs before children enter kindergarten at age 5.[22]

4x

If students are not reading on grade level by third grade, they are **four times more likely** to drop out of school.[23]

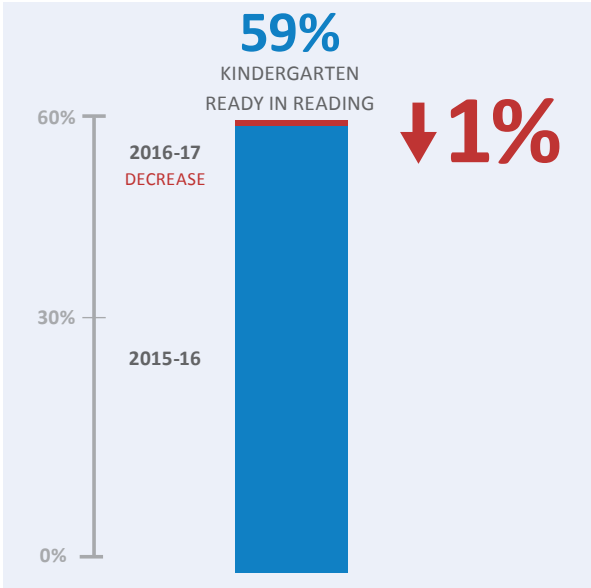
54

Fifty-four percent of Texas eighth graders are **meeting grade level** in math.[24]

PERCENT OF STUDENTS WHO ARE KINDERGARTEN-READY IN READING

Parents are a child's first teacher. To augment this at-home early childhood learning, many districts offer prekindergarten and/or build public-private partnerships with community child care providers. Districts then collect data as students enter kindergarten to assess kindergarten readiness. This data measures just one of the multiple areas of kindergarten readiness. Emergent literacy, which includes areas such as comprehension of text that has been read aloud, which is the basis of phonics. In the 2016-17 school year, kindergarten readiness fell 1% from the previous year.[25]

KINDERGARTEN STUDENTS - FALL 2016

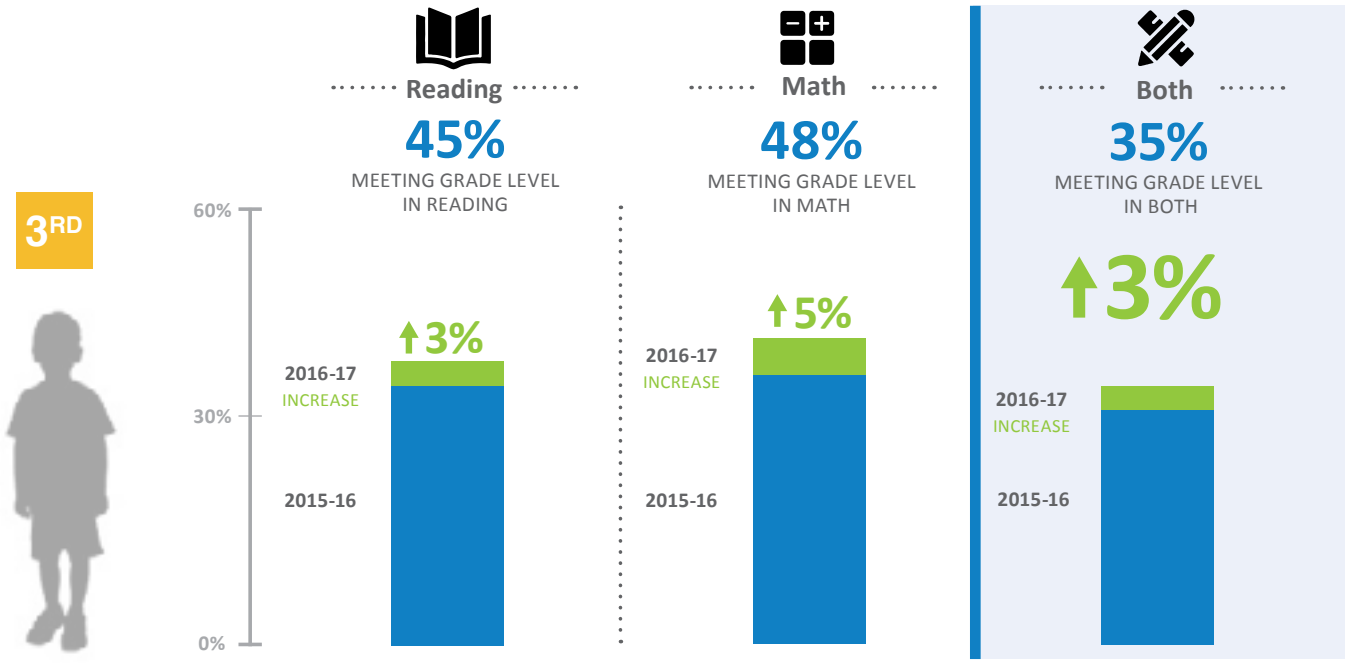


PERCENT OF STUDENTS MEETING GRADE LEVEL IN READING & MATH

One indicator of whether we, as a state, are effectively preparing students for higher levels of learning is performance on the State of Texas Assessments of Academic Readiness (STAAR). The STAAR assesses the Texas Essential Knowledge and Skills (TEKS) as established by the State Board of Education, which outline what students should know and be able to do in each course or grade. Students meeting grade level expectations on the STAAR are likely to succeed in the next school year, and those who reach this level of performance by the end of high school have been shown through research to have a greater than 60% chance of passing freshman level college courses.[26]

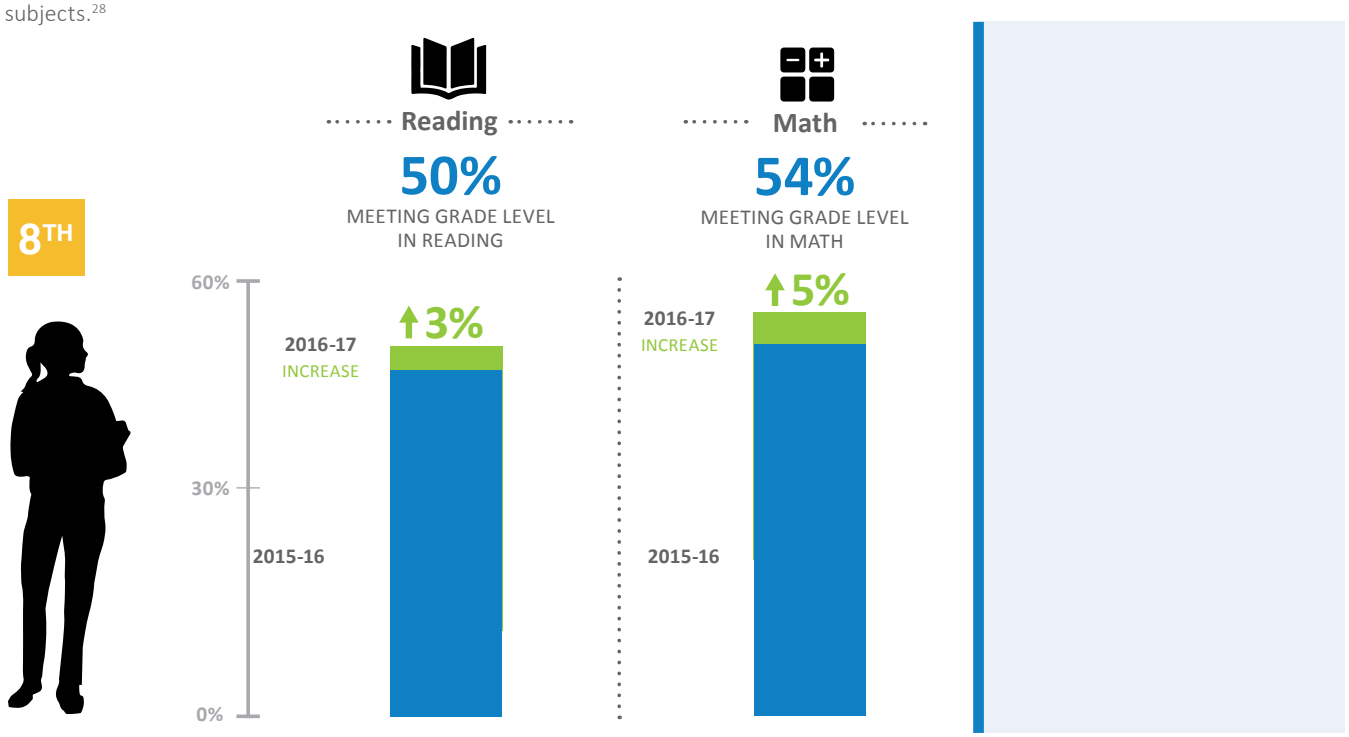
3RD GRADE STUDENTS - SPRING 2017

The state has made gains over the past year, increasing 3% in reading, 5% in math and 3% when it comes to students on grade level in both subjects.[27]



8TH GRADE STUDENTS - SPRING 2017

The state has made gains in the past year, increasing 3% in reading, 5% in math, and 3% when it comes to students on grade level in both subjects.[28]



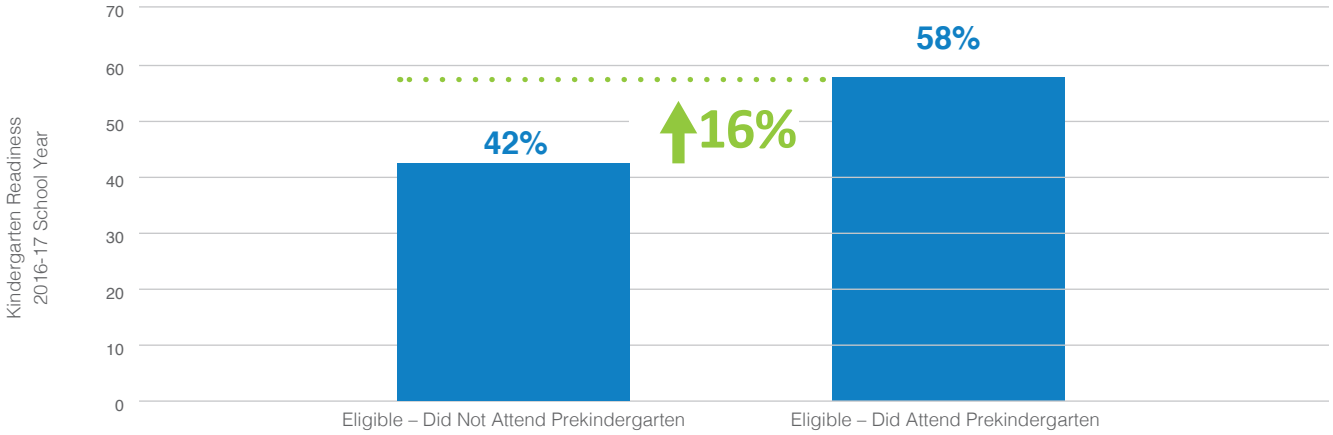
EDUCATING OUR YOUNGEST LEARNERS: WHY PRE-K MATTERS

TEXAS LEGISLATURE HOUSE BILL 4 84th Legislative Session

Prekindergarten establishes a solid learning foundation for children at an early age. High-quality prekindergarten enrollment benefits children through language, social and cognitive skills development.

IMPACT ON KINDERGARTEN READINESS

Prekindergarten helps a child begin their educational journey and arrive in kindergarten ready to learn. Texas schools receive funding to offer free half-day prekindergarten to eligible students. There are a variety of eligibility categories, including being in a low-income family, not yet speaking English, being the child of a military parent, etc. Eligible students who attend prekindergarten start kindergarten with substantially higher rates of readiness.[29]



IMPACT ON LONG-TERM OUTCOMES

↑ 6%	Higher likelihood of graduating high school on time **(66% vs. 72%)**[30]
↓ 2%	Lower likelihood of dropping out of school **(9% vs. 7%)**[31]
↑ 7%	Higher likelihood of enrolling in college **(31% vs. 38%)**[32]
↑ 6%	Higher likelihood for students who enrolled in college to persist in attending a second year of college **(22% vs. 28%)**[33]

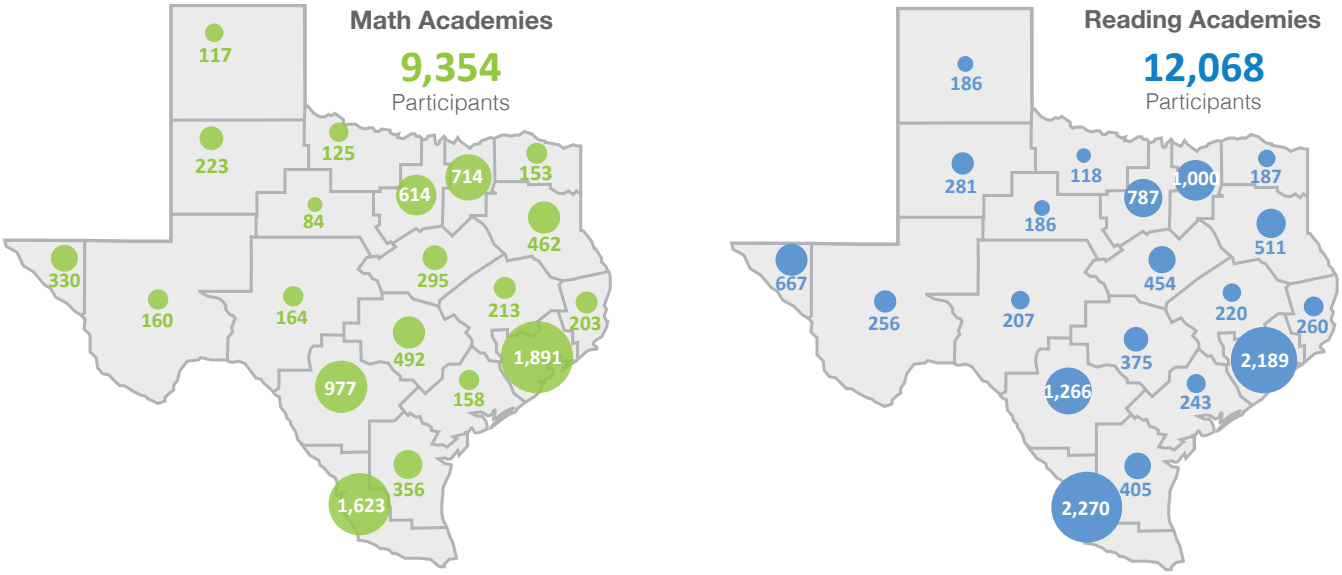
El Paso ISD

NUMBER OF PARTICIPATING TEACHERS IN READING AND MATH ACADEMIES

TEXAS LEGISLATURE SENATE BILL 925 84th Legislative Session
TEXAS LEGISLATURE SENATE BILL 934 84th Legislative Session
TEXAS LEGISLATURE SENATE BILL 972 84th Legislative Session

Texas' Reading and Math Academies[34] provide teachers with classroom tools to enhance their teaching skills. Teachers employed at campuses at which 50% or more of the students enrolled are economically disadvantaged receive priority for the academies.

2017 READING AND MATH ACADEMIES



2017 MATH ACADEMY – TEACHER SPOTLIGHT

Name: Jessica Garza
District: Pasadena ISD
School: Young Elementary
Subject: Mathematics
Grade: 2

Jessica Garza, a second grade teacher in Pasadena ISD, attended the TEA Math Academy in the summer of 2017. An academy focal point included using strategies and activities that encourage students to apply reason and critical thinking about mathematics content.

"The most beneficial part of the experience for me was the opportunity to explore the student expectations for our young mathematicians along with corresponding instructional techniques," said Garza. "I learned how to decipher student expectations in a way that would allow me to ensure that my lessons, instructional activities and assessments aligned to the rigor of each knowledge and skills statement."

An added bonus to participating in the academy for Garza was learning about how the second-grade curriculum aligns with other grade levels. This deeper understanding of the vertical alignment within the state curriculum standards reminded her of the importance of building a strong mathematical foundation for her students.

"The students' work now shows that they have a deeper understanding of mathematics and are able to use mathematical reasoning to justify their approaches," said Garza. "Their success in mathematics, and their use of mathematical discourse, have all been positively impacted because of the lessons learned from my participation in the Texas Mathematics Academy."