## Case Study: Harlingen, TX

In the 2020–2021 school year, Age of Learning's My Math Academy program was piloted across 77 early childhood education classrooms in Texas's Harlingen Consolidated Independent School District (HCISD). As a Title 1 district, Harlingen schools serve students from low-income and rural backgrounds who were most susceptible to under-connected and unfinished learning during the pandemic. At the height of school closures, Harlingen administrators remained committed to providing high-quality education to their students and sought out solutions that would strengthen foundational math knowledge, help teachers identify their student needs, and facilitate personalized instruction for each student.

in tremendous results despite the pandemic . . . you can see our little ones are flourishing. It's because of our fabulous teachers [who] are using the data and the ability to put cutting-edge resources in front of them. \*\*?

—Harlingen administrator

My Math Academy was provided as a solution for more than 900 Pre-K3 and Pre-K4 students and their teachers. Our School Solutions team worked closely with Harlingen administrators and teachers, providing virtual training and webinars that supported an indepth understanding of each aspect of the program.

As part of the Personalized Mastery Learning Ecosystem (PMLE), My Math Academy consists of three components designed to support the learner, teacher, and parent: (1) an adaptive system providing appropriate scaffolds across 130 gamebased activities that address 96 math concepts, (2) a Teacher Dashboard providing real-time student data and recommended supplemental materials, and (3) resources that engage parents at home.

Young learners using the My Math Academy program made gains in math learning to a degree that Harlingen teachers and administrators said they had never seen before. Mastery of math skills doubled for 4-year-olds and tripled for 3-year-olds, compared to prior knowledge assessments conducted at the start of the pilot. Additionally, several pre-K students demonstrated exceptional growth across Texas state standards and performed at a 2nd grade level (Thai & Bang, 2022). Similar math gains were reported when we surveyed Harlingen teachers: More than 90% reported that My Math Academy had a positive impact on math learning skills, including number identification and counting skills, and over 96% reported increases in children's levels of engagement, interest, and self-confidence in math learning (Thai & Bang, 2021). Teachers agreed that the program enabled them to easily identify areas of need for each student and access supplemental materials that supported daily math instruction and aligned with instructional goals. When we interviewed teachers, many described the Dashboard as an essential support, allowing them to focus on differentiating instruction for their students.

Ultimately, Harlingen's experience provides strong evidence for the utility of My Math Academy's personalized learning system and adaptive Dashboards in empowering educators and students, effectively supporting math learning during a school year with many interruptions.

These results convinced the Harlingen administration and board to expand the My Math Academy program to all students in pre-K through 2nd grade.

