

Transforming Instruction to Raise Student Achievement

CHALLENGES

To meet the rigorous expectations of the Texas Essential Knowledge and Skills and Texas College and Career Readiness Standards, Edgewood ISD knew it had to make district-wide changes to prepare its struggling students. To meet and exceed achievement targets on STAAR assessments and the new TEKS, Edgewood saw the need to build the capacity of its staff to lead, teach, and assess the rigorous and relevant content called for in the higher standards. Edgewood ISD partnered with Math Solutions to give teachers and school staff the professional development, strategies, and resources needed to help strengthen students' understanding of mathematics and raise achievement levels.

THE SOLUTION

Edgewood Independent School District is a suburban school district in western San Antonio, Texas. Math Solutions began providing in-service support programs to Edgewood in 2012, focusing on the district's crucial middle school population. Their three middle schools—Wrenn, Brentwood, and Gus Garcia—service more than 11,947 students, an overwhelming percentage of whom are considered economically disadvantaged. Nearly 20 percent of the student population comprises English language learners.

Edgewood's Math Solutions support program began with walkthroughs to assess the needs of the middle schools. These walkthroughs not only formed the basis for the district's in-service support program, but also contributed the baseline from which progress was measured.

Once the schools' needs were assessed, two foundational professional development days were provided, during which educators participated in a survey of their current teaching practices and focused on creating problem-solving experiences that require math reasoning and communication, instructional strategies that promote mathematical understanding, the use of manipulatives in the math classroom, and planning for rigorous, engaging lessons.

Edgewood ISD

San Antonio, Texas

DISTRICT PROFILE

Metro Status: Large City

Total Schools: 22

Grades: Pre-Kindergarten–Grade 12

Total Enrollment: 11,947

ELL Students: 2,098

Students with IEPs: 1,200

GOALS

- 1 Prepare teachers and school leaders for higher standards of instruction as called for in Texas Essential Knowledge and Skills and the Texas College and Career Readiness Standards
- 2 Develop a solid foundation for district capacity in teaching mathematics
- 3 Raise student achievement by strengthening students' understanding of mathematics

Then, throughout the school year, each campus received twenty coaching days tailored to both the strategic goals of the district and the instructional needs of each middle school. Each coaching cycle consisted of the development of a model lesson, observation of the lesson being delivered, and a post-lesson conference. The themes for these coaching days included:

- ▶ Classroom discourse
- ▶ Analysis of student work
- ▶ Model lessons
- ▶ Lesson planning
- ▶ Multiple representations
- ▶ How to allow students to struggle constructively
- ▶ Consideration of how children learn mathematics
- ▶ Questioning strategies

SUCCESS

Toward the end of the school year, representatives from the district, along with Math Solutions coaches, conducted another walk-through of the three middle school campuses, looking for improvements in the schools' learning environments, their use of reasoning and sense-making strategies, and the focus and coherence of the teachers' lessons and whether formative assessment was being used in an effective manner.

The observers noted a marked improvement in all three of the schools, particularly in the rigor being asked of the students. For example, 63 percent of students were observed working in an area deemed "academically risky," compared to 3 percent on the baseline walkthrough. In other words, the students were expanding their comfort zone—and learning new skills.

As they say, the proof is in the pudding. Preliminary results from Texas's STAAR testing showed learning gains of 8 percent for Gus Garcia Middle School. When the results are finalized, all three schools are confident that they will have made historic learning gains thanks to the efforts of their teachers and their Math Solutions professional development team.

I just got the eighth grade math scores from the STAAR test and wanted to THANK YOU for helping grow our teachers. We went up eight points! Thanks again!

Pamela Reese, Principal, Gus Garcia Middle School, Edgewood ISD
