

Profiles in Success

Marlboro Township Public Schools NEW JERSEY

High-performing district looks for new ways to personalize learning

The Marlboro Township Public Schools are a high-performing suburban district that was facing problems many successful schools have dealt with: how to get their high-achieving students to reach even higher, and how to keep them engaged.

The progressive New Jersey district focuses on personalized learning, says district Superintendent Dr. Eric Hibbs. "We compile lots of data on student performance, which teachers use to differentiate instruction. ST Math fits into that model nicely."

Marlboro schools are modeled on self-directed learning, with students progressing at their own pace and setting their own learning goals. That's exactly why ST Math fit into their program so seamlessly, because even high achieving students inevitably encounter challenges that require them to push themselves.

"It causes a bit of cognitive disequilibrium," says Technology Supervisor Mitchell Shatz. "The kids can't figure it out right away, but the answer is right within their reach." Such an approach helps keep students engaged as they build 'grit' and perseverance.

ST Math enables data-driven, student-specific instruction

The Marlboro District began using ST Math in its elementary schools in 2008, implementing a rotation model. After seeing the program's success, the district expanded ST Math to its middle schools and early learning center. Today, every school in the district uses ST Math.

"Taking teaching to the next level is really all about individualizing learning for students," says Michael Ballone, Director of Curriculum and Instruction. "One way that we do that here in Marlboro Township is the purposeful use of our digital tools. And ST Math is an important digital tool that fills a gap that other tools do not."

Teachers were also impressed with the way ST Math helped make abstract concepts more concrete for their students. Shatz, a former teacher, used to cut out strips of paper when



The beauty of ST Math is that kids problem-solve. They get to demonstrate that 'productive struggle' and figure things out on their own.

- Dr. Eric Hibbs, Superintendent, Marlboro

teaching the metric system because the manipulatives helped the kids grasp the concept.

A few years later, he saw the same idea in the ST Math Petals game. "ST Math redefined how I could have spatial-temporal manipulatives for my students. It completely changes how you can present things to your students," Shatz says. "As an instructional tool, ST Math is incredibly powerful."

The program's robust data tools also enabled Marlboro teachers to see exactly which areas students needed extra help with. "Data is the anchor that drives our instruction," explains Ballone. "ST Math lets students make decisions and set their own goals. Teachers can then look at the data and provide students with the tools they need to progress further."

Marlboro Township Public Schools

NEW JERSEY



District Facts

School Grade Levels: PreK-8
School Enrollment: 5,192
District Type: Large suburban
Number of Schools in District: 8



Demographic Breakdown

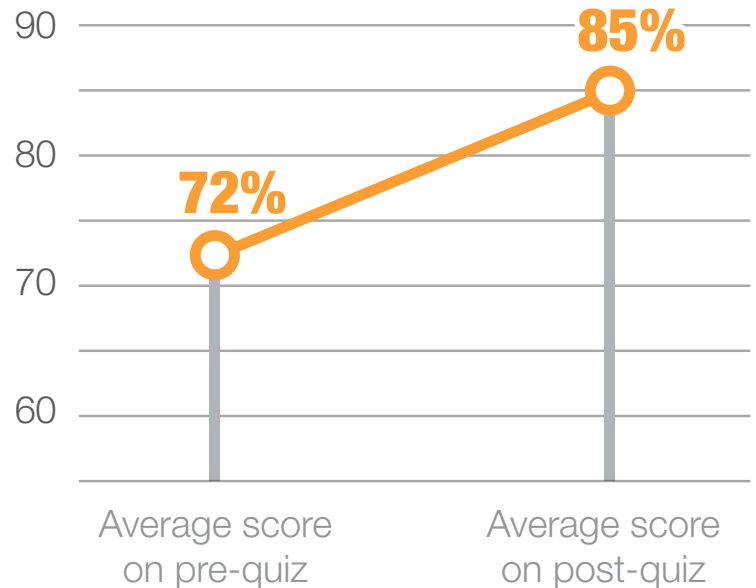
Caucasian: 70%
Other (Asian): 23%
Hispanic: 5%
African American: 1%
FRL: 4.4%



ST Math Implementation

Grades using ST Math: K-8
Type of ST Math instruction:
rotation

Marlboro's Post-Quiz Gains on ST Math Learning Objectives



From an analysis of Marlboro's ST Math students, grades 2-5 and 6-7, over all learning objectives.

+13 Percentage Points
Average post-quiz score gain
over all Learning Objectives

Students challenge themselves as they learn at their own pace

ST Math has become an integral part of Marlboro's individualized learning scheme. When Dr. Hibbs joined the district, ST Math was already in use. It was "the favorite program of all the math buffs in the district," he says.

Today, math specialists work with teachers in first through fifth grade, collaborating to create different ST Math classrooms based on student needs and weaknesses. Ellen Farnham, the District Data Specialist, says that ST Math "helps students to achieve deeper learning by reflecting on their thought process as they solve the puzzles."

Farnham says that Marlboro teachers are using ST Math to help students understand the abstract concepts that are often hard to connect with. By allowing students to

progress at their own pace, the program dovetails neatly with the district's focus on individualized learning.

ST Math is being used by the highest achievers to expand their learning, says Farnham. "The challenge activities are a great resource when students are done with their grade-level content," she says.

Students are engaged with the ST Math games, so much so that getting to play them has become an incentive in some classrooms. One child even wanted to dress up as JiJi the penguin on Halloween, Dr. Hibbs shares. "Everyone should have a program like this!"