ST Math

K-8 Visual Instructional Program

PROFILES IN SUCCESS

Pickerington Schools
OHIO

Moving Beyond the Status Quo

Educators at Pickerington Schools in Ohio take pride in striving for new heights. With over 10,000 students and a notable 96.5% graduation rate, this high-achieving district prioritizes student engagement and enthusiasm for learning. Identifying math and particularly junior high math engagement as a critical focus area, they set about looking for new and creative ideas for instruction.

"We wanted to reengage students to increase excitement and motivation," says Brian Seymour, Pickerington's Director of Instructional Technology.

Embracing technology as the best frontier for educational innovation, but not satisfied with the status quo, they set the goal to develop a unique blended learning approach that challenged and motivated both teachers and students.

From Traditional to "Tradigital" Math Classrooms

Seeing that traditional instruction was leaving math students disengaged, especially in junior high, Seymour first saw the need to update their technology and to work toward a 1:1 device plan. They began building a blueprint for a blended learning model that took the best of traditional methods (some direct instruction) and the best of digital learning (data-driven with high student engagement and autonomy) to develop a truly personalized and differentiated instructional system for all students. The so-named "Tradigital Learning Plan" reimagined the classroom structure into modular station rotations rather than the standard teacher-led model.

Through a grant provided by Ohio's Straight A Fund, intended to help schools launch creative ideas for improving education, Pickerington incorporated the ST Math game-based learning program to support their new plan. After seeing promising results in K-6, they sought more grant funding to expand to grades 7-8.

"There's just not enough instructional time in the day to cover every single standard in detail," says Seymour. "With ST Math, we're able to close some of those knowledge gaps."

> ST Math has really helped us move away from the teacher-led classroom to the student-driven.
>
> - Brian Seymour, Director of Instructional Technology, Pickerington District

Beyond seeing intervention results for students at risk, the district's 7th and 8th grade Math Coach Kirk Keller notes his surprise: "What we found is that a lot of our high-achieving kids also did well using ST Math, following an accelerated curriculum. It can be hard to connect kids above grade level with that higher-level syllabus and ST Math helps with this every time."

Keller appreciates the program's non-language-based visual learning design that gives all students access to math understanding through the use of virtual manipulatives. "The gamification in ST Math is very beneficial," says Seymour. "Parents will call us upset that their kids won't go to sleep at night. They're under their blankets at home on ST Math until 10-11pm at night. Kids are excited about math."

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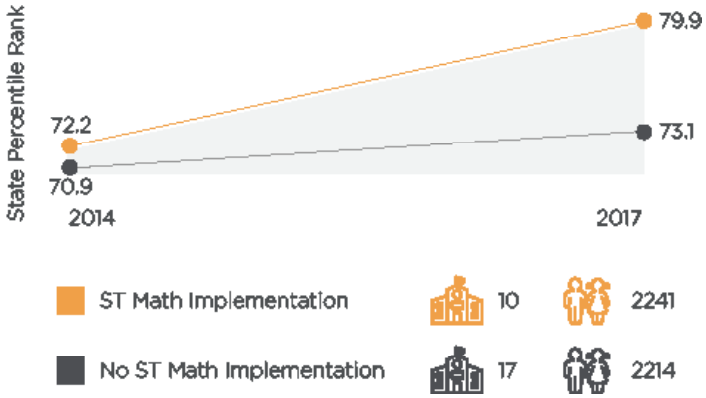
District Facts
District Type: Large, public
Number of Schools in District: 15
District Grade Levels: PreK-12
District Enrollment: 10,250

Demographic Breakdown
Caucasian: 70%
African American: 22%
Hispanic: 5%
Asian: 3%
FRL: 24%

ST Math Implementation
Grades using ST Math: PreK-8
Type of ST Math instruction: in-class station rotations, computer lab

Pickerington Schools Outgrew Similar Schools Statewide



Impact on Mindset for Students and Teachers

Pickerington's Tradigital Learning Plan introduced a big shift in classroom instruction, and as with any kind of change, teachers responded with excitement mingled with some nervousness.

"The greatest impact ST Math had on teachers is the impact on their mindset," says Keller. "At first they were afraid of the games and hadn't thought about math that way. They were intimidated."

But eventually, Keller says, it was the students who showed the teachers the way. Students were excited about celebrating their progress on ST Math. "Our students started being able to show math understanding in different ways. Some even journaled about their work on ST Math."

Seeing all of this, teachers became excited about the games and started learning how to talk to students about them.

Now teachers are using games to strengthen their lessons and studying the ST Math data reports that show each student's area of need, and the district plans to continue this momentum into all grades.

"ST Math has really helped us move away from the teacher-led classroom to the student-driven," says Seymour. "The mindset that it's ok for kids to fail or to struggle, and not to try to jump in as the teacher to save the day--this change is happening."

Pickerington classrooms are continuing to transform into innovative hubs of learning. "Now on any given day, you can see the students at 28 different spots in the classroom station rotations. The teacher is now free to be the facilitator and questioner and be accessible to all students."