

Research Overview | February 2024

My Math Academy®

Virtual school implementation of My Math Academy empowered teachers and promoted substantial growth in students' math skills



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Key Findings

- First and 2nd grade students using *My Math Academy* for an average of 9.3 hours over 15 weeks reached levels equivalent to the next grade in math as measured by the state-administered Star Math assessment.
- All educators reported wanting to continue using *My Math Academy* as a resource to support their instruction and indicated that the programs had a positive impact on their students' enjoyment in learning math.

Background

This study highlights the 2022–2023 school year implementation of *My Math Academy* in a virtual school model at Epic Charter Schools, Oklahoma. It is the first study that focuses on students' use of the program outside of the classroom. The results build on prior evidence of the program's effectiveness in helping students make substantial gains in their math skills while supporting educators' efforts to provide personalized instruction for their learners.

Study Overview

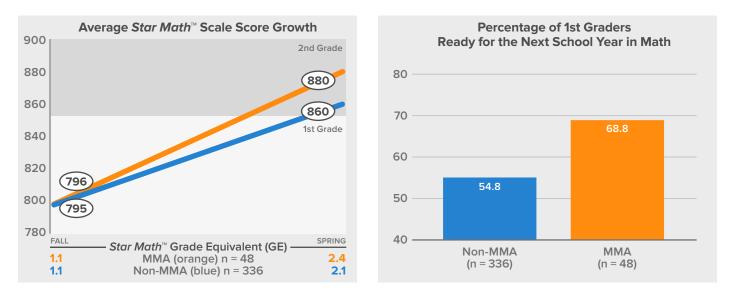
A total of 16 teachers working with early elementary grade students (pre-kindergarten through 2nd grade) used *My Math Academy* (MMA) in a virtual school throughout school year 2022–2023. Across pre-kindergarten through 2nd grade, 282 students used *My Math Academy*. Of these, 84 students had fall and spring Star Math assessment scores.

A total of 2,290 students (1st and 2nd grade) did not use *My Math Academy*. Using a statistical technique called propensity score matching, comparison groups were created for each grade, where students who used *My Math Academy* were matched with those who did not use the program based on the fall baseline assessment scores and key demographic characteristics (gender, special education, English Language Learner status). The results compare the performance of students who used MMA to the performance of comparable students who did not use the program.

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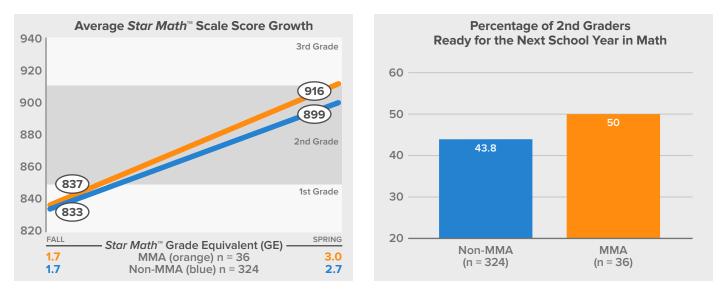
Results



Among 1st graders, 69% reached 2nd grade equivalency by using the program 9.3 hours on average across 14.7 weeks.

Students who used *My Math Academy* ended the school year scoring as well as a typical student in the 4th month of 2nd grade, and approximately three months ahead of their peers who did not use the program.

Compared to similar students who did not use the program, those who used *My Math Academy* scored on average 20.6 points higher and were 14% more likely to reach 2nd grade equivalency. A multiple regression model predicting students' spring assessment score, controlling for fall baseline scores and student demographic characteristics (gender, special education status, English Language Learner status), showed that those who used *My Math Academy* achieved significantly higher scores in the spring (effect size = 0.30, p < .05).



Among 2nd graders, 50% reached 3rd grade equivalency by using the program 9 hours across 15.4 weeks.

Students who used *My Math Academy* ended the school year scoring as well as a typical student at the beginning of 3rd grade, and approximately three months ahead of their peers who did not use the program.

Compared to similar students who did not use the program, those who used *My Math Academy* scored on average 16.6 points higher and were 6% more likely to reach 3rd grade equivalency (effect size = 0.19, ns).

Educator Feedback

On end-of-year surveys, all educators (n = 14) indicated that *My Math Academy* had a positive impact on their students' self-confidence and enjoyment in learning math. They made comments such as "I love knowing my students are getting to practice the skills in a fun way."

Additionally, 93% of the educators indicated that the program empowered them in their work as teachers with comments such as "*I could use the data to see what my kids were working on and what they might need a little more help with*," and "*I felt confident that my students were learning and practicing the skills that were taught.*" All educators indicated that *My Math Academy* is a resource that they would like to continue using.

These survey results were further supported in teachers' end-of-year interviews.

"What I liked was that they were getting a program that was on their level ... if they had missed something, it was picking those up and they were getting a double dose of that. They were getting the extra help on skills that they were missing."

-Pre-K-1st grade teacher

"I had some parents take pictures to show me how their kids can't wait to get to My Math or My Reading Academy. A lot of my students really did enjoy those programs and most of them were decently consistent. It's really important for us to have those supplements, especially since we are a virtual school, and us teachers are not with them every single day."

-Pre-K-2nd grade teacher

"I have all those students—English learners, students with IEPs, students diagnosed with vision or hearing impairments, advanced students—and the only way those kids can play is because of the initial placement that puts them where they need to be. It can differentiate for my 2nd grader who is SPED and is more like a kindergartner and still help him feel successful at the level that he is at."

-K-2nd grade teacher

"For those who used it consistently, they showed growth. Even if it wasn't super consistent, you could still see growth. And it is engaging, it's fun for them. They get really attached to their little characters, and I think that it's well-rounded, it's adaptive, and it helps them to go back and revisit and make sure that they're getting it."

-Pre-K-2nd grade teacher





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