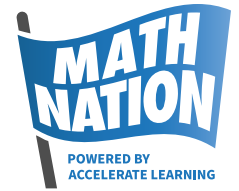


# Publisher Background Information



## Accelerate Learning

Accelerate Learning Inc. produces STEMscopes™, a comprehensive suite of results-oriented STEM curriculum and professional development solutions created by educators for educators, STEMscopes Math is highly adaptable and affordable and supports instruction in any kind of learning environment.

## Math Nation

Math Nation launched in 2013 with the goal of significantly improving Algebra 1 achievement in Florida and reduce disparities in student performance. At that time, just 50% of Florida high school students were proficient in Algebra 1. In high needs schools, proficiency rates were often under 20%.

Because Algebra 1 is a key gateway to higher-level math courses and, ultimately, high-growth careers, such low proficiency rates are likely to have long-lasting negative consequences for students.

We knew that building a strong foundation in Algebra 1 was critical to improving students' chances at success, not only in middle and high school, but also in college and beyond — and that's been at the core of our mission from the start.

Since Math Nation launched, statewide pass rates in Florida have improved by 9%. At schools with a high usage rate, students improved their average pass rates by 20%. Plus, our materials have driven achievement for students in demographics that traditionally struggle in Algebra 1.



Based on the success of our Algebra 1 program in Florida, we expanded our course offerings to provide comprehensive resources for students and teachers for 6-8th Grade Math, Algebra 1, Geometry, Algebra 2, and beyond for educators, students, and families across the country.

Math Nation is a result of ongoing collaboration among teachers, professors, administrators, families, and students. Thanks to the input they provide, we continuously adapt and improve our resources to meet the needs of today's students and teachers.

We began our efforts at building a core curriculum using open education resources in grades 6-8. Our goal was to take this set of high quality instructional materials and add additional supports and implementation enhancements. These enhancements included additional auto-scoring practice questions, high-stakes test preparation, Study Expert instructional videos, enhanced family support, and so much more.

Based on our resounding student success with grades 6-8, we began development of the high school courses (Algebra 1, Geometry, and Algebra 2) with the same relentless student-centered commitment.

### What Motivates Us

Math Nation works with amazing students, teachers, families, and school districts. We celebrate their successes and triumphs, and the challenges they face are what drive us to continue developing resources to provide the education every student deserves. Here are some of the issues keeping us up at night:

- In 2012, just 50% of Florida students were proficient in algebra. In low-income schools, proficiency rates were even lower, with fewer than 20% of students demonstrating proficiency in some schools.
- In Spring 2016, 67% of 8th grade students in Michigan failed to earn at least a “Proficient” score on the state’s M-STEP Mathematics exam, while 63% of 11th graders didn’t score high enough on the state’s MME exam to be considered ready for success in college or a career, according to Michigan Department of Education data.
- Mississippi’s high school graduation rate is on the rise (84% in 2019), but more than 46% of students at Mississippi’s public colleges and universities need to enroll in remedial math courses before they can begin taking credit-bearing, college-level courses in math and related subjects.
- A 2016 study from the National Bureau of Economic Research found that states that reformed their finance systems to send more money to low-income districts saw students’ performance rise over 10 years due to the increased spending. The gains were significant compared to student gains in states that did not increase funding to
- low-income districts.
- Civil Rights data show that states with less funding tend to have higher student/teacher ratios, while schools serving minority students have high rates of first-year teachers.
- A recent study shows that personalized math tutoring resulted in an average increase from a 1.77 GPA to a GPA of 2.35 (effectively a jump from a C- to a C+).

### Our Impact

Multiple evaluations of Math Nation show that increased usage of the platform is tied to increased proficiency across every student subgroup, including students receiving free/reduced-price lunch, every racial and ethnic group, and students with disabilities. These findings hold true at school, group, and individual levels.

The Institute for Education Sciences awarded the University of Florida, a partner in developing Math Nation, an \$8.9 million grant to continue to study, create, and test enhanced personalization features in the online platform to further improve student experiences — ultimately accelerating student learning and enhancing performance.

Math Nation is always evolving to incorporate more evidence-based strategies, becoming an even stronger tool in supporting students' math learning.

### Backed by Research

Math Nation uses research-based features to motivate students and fuel their learning:

- Research on Math Nation's videos has found that the presence of instructors in our videos significantly improved students' satisfaction and sense of their own understanding of both easy and difficult topics.
- Students learn best when they can relate to the material. Math Nation's content is tailored to include examples, references, and real-world situations that students will recognize and can apply to their daily lives.
- Math Nation understands that students feel empowered and succeed when they have some agency in their learning. That's why our videos let students choose between Study Experts, each with a unique teaching style and pace to match students' preferences. (And we even have a new tool to help students pick their best match!) Math Nation's videos are designed to help students build connections with our Study Experts through eye contact. Why is this important? According to research, eye contact increases students' motivation and concentration.
- Research shows that students who collaborate in carefully designed and monitored online communities—like the Student Walls—can achieve deeper learning and better outcomes.
- Immediate feedback can help students improve their math results, but most students receive less personalized feedback than they need to learn tough-to-tackle concepts. Math Nation's Test Yourself! Practice Tool quizzes students, provides immediate results, and directs them to resources that target gaps in their understanding, so the feedback can be immediate and impactful.

