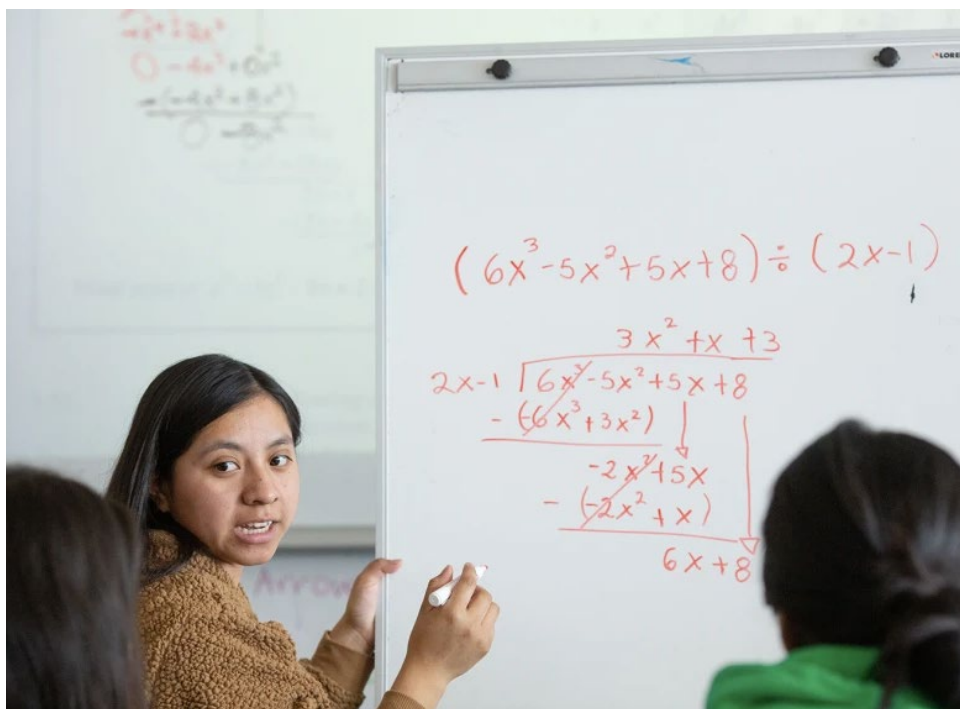


# Tutoring Works... When It's Done Right



Allison Shelley for All4Ed

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**EDITOR'S NOTE**

Consistent high-dosage tutoring aligned to classroom instruction is **driving measurable gains in reading and math**, especially in districts that pair it with strong teaching and clear academic goals. This spotlight highlights the specific math skills that set students up for **Algebra 1 success**, evidence-based strategies that accelerate **catch-up growth**, and even how **thoughtful tutor matching** can spark girls' interest in STEM. What are the keys to success? **Intentional design, sustained commitment, and high-quality tutoring** embedded in a coherent system are a powerful formula for **lasting academic recovery**.

Published November 18, 2025

# Why Hasn't Tutoring Been More Effective?

Implementation continues to complicate even well-studied interventions

By Sarah Schwartz

**T**he prescription was everywhere as the full extent of academic damage wrought by the pandemic first became clear: Set up tutoring programs to catch students up.

The same advice echoed from policy papers, think tanks, and the federal government, which put hundreds of billions into school recovery dollars. Experts and researchers heralded tutoring as an evidence-backed solution for addressing significant academic gaps, and some school systems saw early successes.

Now, though, several evaluations of pandemic-era tutoring programs are showing smaller effects on student progress than expected—or revealing that didn't improve outcomes at all.

The most recent of these, from researchers at Stanford University's SCALE Initiative, examined math and reading tutoring programs in a large, urban district during the 2022-23 and 2023-24 school years. Neither led to overall gains in academic achievement.

But when researchers dug deeper into the data, they identified implementation problems that could be driving these null effects.

The findings add to a growing body of evidence around tutoring in a post-COVID landscape that suggests the effectiveness of a program hinges on the nitty-gritty details of how it is run—how often students meet with their tutors, for instance, or whether lessons are tailored to their specific needs.

Studying these implementation details could help school systems build more effective tutoring initiatives in the long run, said Elizabeth Huffaker, an assistant professor of educational leadership and policy at the University of Florida, and the lead author on the SCALE paper.

"There is a lot of potential upside to findings like this, even though we wish that students were seeing more across-the-board gains as soon as possible," she said.

## Successful tutoring is hard to replicate at scale

The tutoring programs that districts stood up over the past five years are still in relatively



Stock/Getty

early stages, said Matthew Kraft, a professor of education and economics at Brown University who has studied tutoring's effectiveness.

"People should be asking the question, 'Should we spend money on tutoring?' That's a totally fair question," he said. But findings that some pandemic-era tutoring programs aren't effective right now doesn't preclude them becoming more successful as districts refine and retool implementation, he said.

"We haven't gotten there," said Kraft. "We are tinkering toward that possible equilibrium. I think it would be a real loss in incremental innovation and improvement if we abandon that possibility."

From another vantage point, though, the problem is the same one that has continually plagued other major efforts to boost achievement, from class-size reduction to comprehensive school reform models to curriculum reform: scaling.

In practice, it's often hard for schools to replicate the precise conditions that research on tutoring suggests can move the needle. Those include students learning from tutors one-on-one or in very small groups at least three times a week for about 50 hours of instruction over the course of a semester.

In a 2024 meta-analysis, Kraft and researchers Beth Schueler and Grace Falken examined 265 randomized controlled trials of tutoring. On

average, these studies showed that tutoring had a large, positive effect on student achievement.

But when they reran the numbers looking only at the studies that tested large-scale tutoring programs in the United States, and measured students' outcomes via standardized tests, the effect size shrank by about a half to two-thirds, with larger tutoring programs having smaller effect sizes.

In part, that's because larger programs tend to have higher student-tutor ratios and less time spent in tutoring than smaller programs, Kraft said. It's also possible, he said, that "the quality of delivery and implementation starts to slip when programs are scaling."

It's easier to find 10 strong tutors, in other words, than 100.

"What we're learning from a really unbelievable wealth of rigorous studies, including the new study by SCALE, is a core insight in education," Kraft said. "Implementation always trumps the base design of an educational intervention. You have to do something well for it to work."

## What went wrong in one kindergarten tutoring program

The SCALE study examined an early literacy tutoring program with 270 kindergartners and 1st graders, and an early numeracy

program that served about 1,000 kindergartners. Paraprofessionals served as tutors in both programs.

Neither group of students received as much tutoring as the programs suggested. Students in the reading program, on average, went through about 30% of the recommended sessions, while students in the math program went through about 36% of their lessons.

In part, this was due to school testing schedules, said Huffaker. Tutoring couldn't start until students were evaluated with initial assessments, which delayed the beginning of the program to November. And within the math program, almost half of the students who were supposed to receive tutoring never got it—administrators didn't tell classroom teachers that those students were supposed to participate in the study.

But because the tutoring program was district-wide, the researchers were able to take advantage of differences in implementation in different schools. They found that when students received at least half of the sessions they were supposed to in the math program, achievement started to grow, and the effect got larger the more of the program that students attended.

The result delivers a strikingly simple insight, but one that could explain why some large-scale programs are found ineffective: “The core idea and promise of tutoring is showing up, but only if students are receiving the tutoring,” Huffaker said.

### **Dosage, tailoring both key factors to effective programs**

In reading, the researchers found different patterns. Even when students completed more of the tutoring sessions, they didn't see gains, on average.

Instead, lower-achieving students saw some growth compared to a control group, while students who started at a higher baseline didn't.

The literacy program featured evidence-based instruction, but every student started at the same place, with very beginning skills in phonemic awareness—the ability to recognize and manipulate sounds. It's likely, Huffaker said, that most students didn't reach enough material to grow much beyond where they started.

The math program, by contrast, allowed for more individualized instruction. “There was less of a requirement to do every lesson in order, and more flexibility to skip around,” she said.

Together, the findings suggest the importance of tailoring tutoring to student needs, and making sure they have enough time with tutors to make progress, Huffaker said.

Through interviews with school leaders, the researchers learned that campuses where students progressed through more of the tutoring program and were more successful had prioritized running the program effectively.

“They instituted dedicated time every single day for the paraprofessional and the teacher to coordinate about instruction, and to make sure this is actually happening,” Huffaker said.

Leaders need to allot time and effort to this kind of collaboration, she added, especially if the programs depend on people who already wear a lot of hats in the school. ■

Published July 16, 2025

## One District's Secret to Boosting Reading and Math Scores

By Kaylee Domzalski

**S**tudent achievement has fallen nationwide. But the Metro Nashville district began to see this decline earlier, and has been working to address it since 2019.

In the years since—and despite a global pandemic—they've seen marked improvements.

The district is one of only two in the country to place in the top 10 for both reading and math, according to a joint report from Harvard University and Stanford University, and significantly outpaces the rest of the country in academic recovery.

A key strategy is high dosage tutoring, where students meet in small groups with a designated tutor three times a week for 45 minutes. Tutoring can cover reading, math, or both, depending on student needs. And tutors are made up of both qualified teaching staff and dedicated volunteers (many of them leaders in the school community and beyond) who facilitate both in-person and virtual tutoring.

Since the Accelerating Scholars program launched in the fall of 2021, the district has provided high-impact tutoring to more than 7,000 students, supported by more than 2,000 tutors.



Education Week

According to Superintendent Adrienne Battle, the district has emphasized high quality whole-class instruction, in addition to “being very strategic and deliberate in the way we intervene when students were off pace, where there was an opportunity gap that we needed to close.” ■



Nicholas Ingram/AP

Third grader Parker, left, and a classmate at Highland Elementary School in Columbus, Kan. Parker started this school year reading at the level of a 1st grader, but caught up after months of phonics drills and small-group work. Kansas doesn't retain 3rd graders based on reading scores, but many states that do now provide similar supports to students at risk of repeating the grade.

Published May 21, 2025

## Is 3rd Grade Retention the Secret to Better Reading Outcomes—Or Something Else?

By Sarah Schwartz

**A**s states pass laws requiring schools to follow the “science of reading,” one aspect of these policies has stirred up particular controversy: Holding back struggling readers who don't reach proficiency by the end of 3rd grade.

Some research shows that states with these retention policies have seen bigger student test-score increases than states without them.

Now, a new study suggests that the benefit to kids doesn't actually come from having them repeat a grade. Instead, it stems from the extra reading support that's unlocked when students are flagged for retention.

Researchers at the University of Michigan and the University of Pennsylvania analyzed reading scores for more than 168,000 students who were 3rd graders in Michigan during the 2020-21 and 2021-22 school years, when the state had a retention policy in place. (Gov. Gretchen Whitmer, a Democrat, signed a bill to repeal the policy in 2023.) They compared students who scored just below the cut-

off for retention on the state test to students who scored just above.

Third graders who scored just below the cutoff received access to reading support services, which varied by district—offerings like summer reading programs or high-dosage tutoring. This group of children scored 0.045 standard deviations higher than the group of 3rd graders who scored just above the cutoff, and didn't receive these services.

Districts saw these effects even if they didn't actually hold back any students.

“It's not a really big effect, but it's something that is meaningful to consider,” said Brian Jacob, a professor of education policy at the University of Michigan, and an author on the paper. The difference amounts to about an eighth of the growth that students would typically make between 3rd and 4th grade, he said.

While the study implies that retention itself isn't doing much to move the needle on students' reading outcomes, it doesn't necessarily mean states should get rid of retention requirements altogether, Jacob said.

Perhaps the high stakes of retention act as a catalyst for districts to zero in on student

performance and prioritize extra services.

“If there weren't this potential for mandated retention,” he asked, “would states and districts have the political will to provide the supports in the first place?”

### Can the ‘threat’ of retention ensure students get the support they need?

At least 26 states and the District of Columbia tell school districts to hold back 3rd graders who don't reach reading proficiency by the end of the year, though most offer exemptions, according to a tracker maintained by the Education Commission of the States.

Third grade is regarded as a turning point in reading, when students are expected to read more complex text across the school day. If they can't read at grade level in upper elementary school and beyond, it's much harder for them to learn new material in any subject, from social studies to science to math.

But whether giving kids another shot at mastering reading skills in a second 3rd grade year actually leads to better outcomes is an open question.

Studies out of several states—including Florida, Indiana, and Mississippi—have shown that retention in early grades leads to higher student test scores down the line. Other analyses have underscored a key component of these policies. Retention schemes that offer additional academic support to students, beyond just repeating the same academic content, are more likely to lead to positive outcomes, those analyses have found.

Still, some research has shown negative social-emotional outcomes for retained students. And retention policies disproportionately affect students of color and students from low-income families.

Further complicating the literature is the fact that, in many states, few students are actually retained. That was the case in Michigan, where the new study took place. About 5.8% of 3rd graders who took the state test were eligible for retention during the 2021-22 school year, but only 0.6% of students were held back, according to a report from researchers at Michigan State University's Education Policy Innovation Collaborative.

But this is a feature—not a bug—of a strong system of statewide reading supports, said Kymyona Burk, a senior policy fellow at ExcelinEd, an education advocacy organization launched by former Florida Gov. Jeb Bush. The group has written model legislation for early reading instruction that includes 3rd grade retention.

“Retention is not the goal of the retention policy,” Burk said. “The goal is for students to be identified early and receive the tutoring, the attention, the individualized reading plan to prevent a student from being retained.”

Retention policies are effective because they motivate adult behavior, Burk said.

It’s possible that’s what happened in Michigan, said Jacob. As part of the state’s Read by Grade 3 law, teachers in grades K-3 were required to give periodic reading assessments and provide extra support to those students who were struggling in advance of the 3rd grade assessment.

“There, I think maybe the threat of retention really could have influenced the effectiveness of those services,” he said.

### **States should be collecting data on the effect of support services, researcher says**

Of course, retention wasn’t a totally empty threat in Michigan—more than 500 students were held back in 3rd grade in the 2021-22 school year, for example.

The policy had unequal effects. Students from low-income families who scored below the cut-off on the state test were more likely to be held back than students from high-income families who scored similarly.

Researchers who studied this phenomenon suggested that the difference might stem from parent advocacy. Students can avoid retention by employing one of several “good cause” exemptions, which higher-income families might have had more success pursuing, they hypothesized.

In 2023, when the state Senate advanced the bill that would eliminate Michigan’s retention requirement, Democratic state Sen. Dayna Polehanki said that the change would “ensure our kids have the reading supports they need—and eliminate the punitive and problematic mandatory retention piece they don’t.”

Several states require that districts create individual reading plans for struggling students and provide evidence-based interventions, without also requiring retention. But it’s hard to know whether they are moving the needle on student learning because most states’ longitudinal data don’t track the specific interventions students receive, Jacob said.

“Usually that’s held at the school or district level, so it makes it hard for researchers to dig in,” Jacob said. “If early literacy is really a priority, and states want to focus on this, and they think the support services are a key component of this, they should be collecting data and looking at the data.” ■

Published May 21, 2025

# How a Tutor's Gender Affects Girls' Interest in STEM

By Lauraine Langreo

**T**utoring has become a popular intervention for schools grappling with stagnant academic achievement.

A large body of evidence demonstrates that high-impact, high-dosage tutoring can effectively move the needle on student academic outcomes.

Now, a new study from Stanford University is adding to that body of research, finding that pairing girls with female math tutors increases the students' STEM interest and improves their academic performance in math.

Carly Robinson, the director of research for the SCALE Initiative at the Stanford Accelerator for Learning, spoke with Education Week about the implications of the study.

This conversation has been edited for length and clarity.

## Why study the impact of a tutor's gender on girls' academic achievement?

There's a lot of literature out there on demographic matching between students and teachers and how students who share demographic similarities with their teachers may experience some better academic or social outcomes. That hasn't really been explored in the tutoring space.

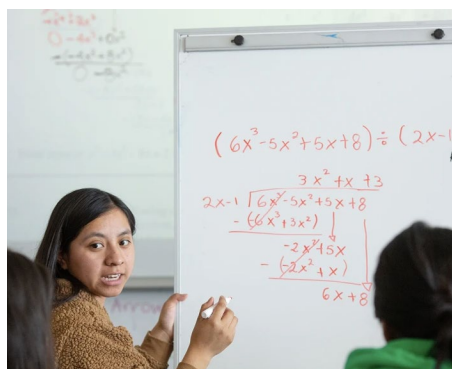
This study [conducted in the 2021-22 school year], in particular, focuses on 9th grade students taking algebra—a gateway course to their future experiences in math and other STEM subjects. What could the impact of a math tutor in 9th grade be on their educational experiences?

One of the things that also is evident in the literature is that despite performing equally well in STEM subjects and in math, girls are underrepresented in upper-level STEM courses, in pursuing STEM majors, and in pursuing careers in STEM.

All of these things together really motivated our interest in studying what the impact of exposing high school girl students to female tutors and how that would impact both their motivation and interest in STEM as well as their performance.

## What were the study's findings?

We were really looking at the end-of-the-year perceptions and performance over the course of the year.



We found, among students who took the final survey about their tutoring experiences, [that] girl students who were paired with female tutors had reported greater interest in STEM compared with girls who were paired with male math tutors. We measured their interest in STEM by asking students how interested they were in pursuing STEM as a major in college, how interested they were in a STEM career, and how useful they thought math would be to them in the future.

We were also able to look at their course grades over the course of the year and we saw that when girl students had a female tutor, as opposed to a male tutor, they were about 4 percentage points more likely to earn a C-minus or better in Algebra 1. There was no standardized assessment to look at, so view this as suggestive evidence that their performance and, subsequently, their course grade improved as a result of that exposure to the female math tutor.

## What do you think educators should take away from this?

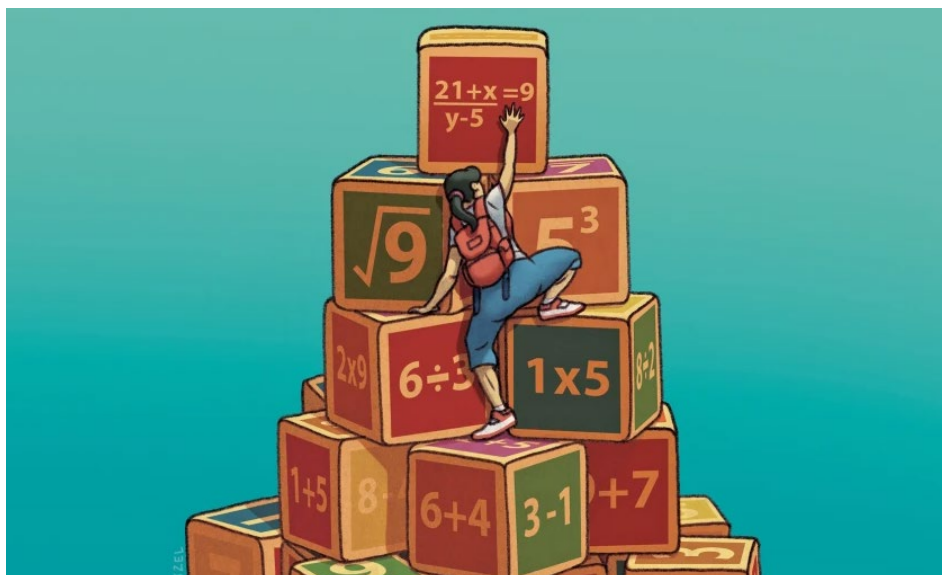
I actually don't think the right practical or policy solution is to match the tutors based on their demographics, whether it be gender or race or another feature. I think that could have a potential negative impact on other things. But I do think that it highlights that maybe girls don't often see themselves in STEM and that being exposed to a female tutor who represents the pathway that they could take is impactful. This idea of ensuring that your tutor base or educator base is more diverse and represents the students who they're working with, which would allow for that sort of exposure and role modeling, might be a way to positively impact the educational experience for students.

## Why might it be a challenge for schools to have an educator or tutor base that's more representative of the student population?

What's proved to be very hard is to change the demographics of the educator workforce in a short period of time, particularly for teachers. However, tutoring is an interesting example of how you might be able to build a more diverse supply of these educators in a shorter time, because the barriers to serving as a tutor are lower. This is a hypothesis that we're trying to test in some of our other studies, but [tutoring] could be a pathway toward diversifying the teacher pipeline down the road, too.

## Are there other findings from the study that you want to highlight?

We saw that the increase in STEM interest and course grades among girls were being driven by tutoring that was taking place in person as opposed to virtual formats. We didn't randomly assign whether students were receiving tutoring virtually or in person, so we can't make the causal claim that in-person tutoring matters more for the female student-tutor gender match, but we see the results were largely driven by those students and tutors who are working together in person. In both cases, whether it was in-person or virtual tutoring, the tutoring was part of the school day. There's more to learn about how these different types of learning formats can affect the relationship between educators and students. ■



Chris Wheelzel for EducationWeek

Published May 13, 2025

## A Subset of Math Skills Predicts Algebra 1 Success. What Are They?

By Sarah Schwartz

**I**n math, Algebra 1 is a make-or-break course.

The class is the gateway to high school math, and struggling to complete it can close off those higher-level pathways—and even jeopardize students’ ability to graduate. Still, a substantial proportion of students fail Algebra 1 on their first attempt.

Why is the class so challenging for so many teenagers? The problem may be rooted earlier in foundational gaps that begin earlier in math, encountered in middle school—and even elementary school, according to a new report from TNTP, an organization that consults with schools on teacher training and instruction, and New Classrooms, a nonprofit that designs personalized learning models.

The new study, based on an analysis of the math patterns of about 2,000 students, could provide clues about how to intervene earlier for struggling students.

Math spirals. Content taught in earlier grades lays the foundation for higher-level work later on. Students who had gaps from prior grades did worse in Algebra 1, the researchers found.

But how teachers address those gaps matters, they say.

There were certain skills from prior grades that seemed to unlock success in the course—

those that undergirded the concepts that students would learn in Algebra 1. Students who had mastered that specific set of skills were more successful in the course than students who didn’t have them, even if they had a similar level of general math knowledge.

The findings suggest that helping kids who are behind succeed in this class requires “fine-tuned” support, said Adam Maier, a partner at TNTP and a researcher on the report.

States and districts have proposed a host of different solutions to improve Algebra 1 enrollment and pass rates—accelerating all students into the class in 8th grade, requiring all students to wait until 9th grade, and offering a double dose math of periods, among others.

The report signals that instructional choices are just as important as these policy decisions, said Elizabeth Huffaker, an assistant professor of education at the University of Florida, and the author of a recent brief on evidence-based policy approaches to improve Algebra 1 outcomes.

“All of our policies kind of need to be downstream of some really core teaching and learning principles,” she said.

### Why key ‘predecessor’ skills might unlock Algebra 1 success

The report’s authors examined the math performance of about 2,000 students who took

Algebra 1 during three school years, between 2021-2024. The students all used New Classrooms’ supplemental online learning platform, which includes lessons on Algebra 1 content and key algebra topics from prior grades. (The sample is not nationally representative—students in the group were most commonly in schools with about 80 percent of students receiving free or reduced price lunch and had more Black and Hispanic students than the typical school in the United States.)

Analyzing student attempts on problems, the authors determined what “predecessor” skills were most likely to support new learning of Algebra 1 content. For instance, being able to solve multi-step linear inequalities requires students to first know how to write and graph inequalities—a 6th grade skill—and translate algebraic inequalities from sentence form to numerical representation, a 7th grade skill.

Students who didn’t have much prior math knowledge at all were the least likely to master new Algebra 1 concepts, with a 13% success rate. Students who had most of the math knowledge from previous grades, but lacked most key predecessor skills, fared slightly better, with a 31% success rate on mastering new Algebra 1 concepts.

But students who had most of the math knowledge from previous grades, including the predecessor skills, did the best. They had a 58% success rate on new Algebra 1 content. These skills span a wide range of topics, from estimating square roots, solving multi-step equations, and representing rational numbers. (See the whole list here.)

Using this past student data, the researchers employed statistical modeling to predict how much students would learn in Algebra 1 classes if their teachers prioritized predecessor skills while also teaching Algebra 1 concepts.

This targeted approach, in which each student received individualized support, outperformed scenarios in which teachers either re-taught all prior grades’ content or only focused on grade-level skills.

This finding may seem obvious to teachers who regularly see classrooms of two or three dozen students, all at different levels, and try to differentiate to meet all of their needs. And teachers often say that attempting that kind of individualized attention and activity curation is nearly impossible in a whole class setting—in part due to restrictions on time, and in part because they rarely receive such detailed diagnostic information.

“This is not all on the teacher to take all of this information and do this independently,” Maier said. “They need to be working in a system.”

The report can inform districtwide structures, said Maier.

### How the predecessor approach could inform Algebra 1 interventions

Math intervention programs, for example, often aren't set up to provide this kind of targeted, individualized support, the report's authors write.

"Our sense is, the more that schools and districts begin to demand these types of capacities, the more the market will adjust to these demands," said Joel Rose, the CEO and co-founder of New Classrooms.

Employing the key predecessors approach could also help schools reap greater rewards from proven policy solutions, said Huffaker.

Her brief identifies research-tested strategies to drive student success in the subject, including tutoring and extended time during the school day, such as putting struggling students in two blocks of math instead of one. Educators in those settings could "really hone in on those key predecessors," she said.

Identifying and organizing these skills, as the TNTP and New Classrooms report does, is "quite useful," said Jon Star, a professor of education at Harvard University who studies math learning. (Star was not involved with the report.) "There's a granularity in this report that we don't usually see in other studies," he said.

Even so, he said, he would be interested in further research that explores how even earlier years of students' math education affect Algebra 1 success.

The vast majority of key predecessors that the report identifies come from 8th grade math. "On one level, there's kind of an obviousness to that," he said.

"But what wasn't as well addressed here, but perhaps could be, was identifying the kind of predecessor skills in grades 5, 6, 7 that best predict performance in Algebra [1]," he said.

More clarity could be helpful because there's some disagreement in the field, he said. Experts are divided, for example, on the importance of fractions, Star said. Does understanding how to manipulate them unlock special algebra understanding, or is there some other skill that drives the correlation between students who are good with fractions and students who do well in Algebra 1?

Still, Star appreciated how the report reinforces "the interconnected nature of the math curriculum more generally."

"There's an incredibly useful coherence to the structure of the math curriculum," he said, "where topics do relate and follow closely to prior topics." ■

## Who We Are

K12 Tutoring partners with school districts to deliver high-impact tutoring that strengthens core skills and supports consistent academic growth through small-group and 1:1 support.

Independent Research Conducted by The EdTech Collective  
Justine Bautista, Ph.D. | Molly Henschel, Ph.D. | Andrew Scanlan, M.A.  
February 20, 2026

## Middle Grade Math Outcomes on State Assessments

This ESSA Level II and Level III research examined middle grade math outcomes across multiple states and implementation contexts.



[One study](#) compared students who received K12 Tutoring with matched peers who did not participate, enrolling students in grades 4–8 across three schools during the 2023–2024 and 2024–2025 academic years. Students who received K12 Tutoring achieved significantly higher scores on the Texas STAAR math assessment than matched peers, an estimated gain of 3.7 percentile points, with consistent effects across subgroups, including students with disabilities, English learners, and economically disadvantaged students.

**+3.70**

Percentile points in math than matched peers  
(Grades 4-8)



[An ESSA Level III study](#) examined the relationship between tutoring time and Virginia SOL math performance for students in grades 4–8, finding a positive association between tutoring minutes and scores, even after accounting for students' starting academic level.

**+3.92**

Percentile points in math/hr.  
(4th Grade math)

**+2.36**

Percentile points in math/hr.  
(5th Grade math)

Together, these studies demonstrate that K12 Tutoring can support improved math outcomes on state assessments across multiple contexts and implementation models.

**+1.13**

Percentile points in math/hr.  
(7th Grade math)

### District Implication:

Standards-aligned, high-impact tutoring supports measurable gains on state accountability assessments across diverse student populations.

## Our Tutors

K12 Tutoring's educators are certified teachers trained in virtual instruction and small-group learning. Each delivers focused sessions aligned with district goals and student needs, building strong relationships and using real-time data to personalize instruction so every session strengthens skills and accelerates growth.



Independent Research Conducted by The EdTech Collective  
Justine Bautista, Ph.D. | Molly Henschel, Ph.D. | Andrew Scanlan, M.A.  
February 20, 2026

## Elementary Reading and Math Outcomes on Benchmark Assessments

ESSA Level II matched comparison research examined literacy and math outcomes among elementary students who entered the year below the benchmark.



Several ESSA Level II studies measured student improvement in early literacy and math using benchmark assessments administered throughout the school year. In [the literacy study](#), K12 Tutoring partnered with virtual schools serving students in grades 1–3 across multiple states. [For math](#), K12 Tutoring worked with students in grades 2–6. Both studies used a quasi-experimental design with propensity score matching to compare tutored students against similar peers who did not participate.



Literacy sessions were scheduled multiple times per week to complement core reading instruction. Students who received K12 Tutoring demonstrated stronger growth on reading assessments than matched peers, with especially meaningful gains for students who entered well below benchmark. Math tutoring was delivered in small groups of fewer than four students, averaging 12 sessions over the school year. Tutored students outperformed matched peers on end-of-year math assessments, and students receiving higher-dosage tutoring (more than 12 hours) experienced the greatest gains.

For district leaders, this research provides evidence that K12 Tutoring supports foundational competencies and helps young students build the skills they need for later grades.

### District Implication:

Certified, consistent tutors delivering structured, skill-targeted instruction can accelerate foundational growth for students entering below benchmark.



## Our Programs

K12 Tutoring programs are designed to align with district instructional goals and scheduling realities. Sessions can occur during intervention blocks or outside core instruction, structured to ensure consistency, measurable dosage, and actionable progress monitoring. Programs support learning recovery, course success, and long-term student outcomes.

Independent Research Conducted by The EdTech Collective  
Justine Bautista, Ph.D. | Molly Henschel, Ph.D. | Andrew Scanlan, M.A.  
February 20, 2026



## High School Course Grades in Reading and Math

An ESSA Level III study examined the relationship between tutoring time and course grades among students in grades 9–12 across multiple states.



The study tested whether time spent in tutoring was associated with better course grades in math and English language arts (ELA), with sessions delivered one-on-one or in small groups. Findings showed a positive association between tutoring time and course grades in both subjects, and students who accumulated more tutoring hours over a semester tended to earn higher course percentages than peers with less exposure.



For districts, these results underscore K12 Tutoring's value as a support for college and career readiness. High school students often juggle competing responsibilities and may hesitate to seek help, but need an accessible, flexible tutoring model can make a meaningful difference. Because course grades are a key indicator of credit accumulation and graduation progress (National Academies of Sciences, Engineering, and Medicine, 2019), they are of high interest to districts and families alike.



## Our Partnership

K12 Tutoring partners with districts to design, launch, and sustain tutoring programs aligned to instructional priorities and operational realities. Our team collaborates with district leaders, school administrators, and instructional staff to ensure programs are implemented with clarity, consistency, and measurable impact.

We provide structured onboarding, scheduling coordination, data reporting, and ongoing communication to support district teams throughout the partnership.



Our National  
Footprint  
and Scale

200k+

Tutoring sessions  
delivered

195k+

Students  
Served

1,100+

Certified  
Tutors

160

Courses  
Available

## What District Leaders Say

“They’re open to do whatever we need as a school. They are in it as a partnership. We can provide to them what we would like and they will provide that opportunity.”

**Elementary School Principle**

“When I heard that the tutors are certified, we could have them virtually, and working on a 1:5 teacher-to-student ratio, it was a win-win for everybody.”

**Superintendent**



Published May 05, 2025

## 5 Research-Backed Ways to Help Students Catch Up in Math

By Sarah Schwartz

Students are barely beginning to recover from a historic decline in math performance. Across every grade and region of the country, students in every racial, income, and disability group have flatlined or lost ground since 2015, wiping out nearly two decades of math progress across the country.

These declines have been driven by struggling students who are falling further and further behind. About a quarter of 4th graders and nearly 40 percent of 8th graders—including a majority of Black and Latino students and those from low-income households—cannot meet basic achievement on the National Assessment of Educational Progress. That means they might struggle to find the area of a rectangle or to compare fractions to percentages.

While pandemic-era school disruptions worsened learning loss and achievement gaps and have exacerbated math-teacher shortages in many districts, several areas of math achievement have been on the downward slope for more than a decade. In particular, 4th and 8th grade students continue to decline in geometry skills, which have not rebounded at all since the pandemic.

Many teachers report having less time to cover a wide variety of math topics with students across disparate achievement levels.

A nationally representative survey of educators conducted by the EdWeek Research Center this spring shows how the bell curve has flattened in many classrooms. More than 60 percent of math teachers said their lowest-performing students trail two, three, or even more years below grade level, while nearly 70 percent of math teachers said their highest-achieving students work at least a year ahead of grade level.

Teachers have limited preservice training in how to approach key math concepts and links while differentiating across such a wide range of student needs. But trying to cover too many concepts without connecting them can backfire in a similar way to cramming for a test—leading to students “turning the math brain off.”

### Follow the research

Doing math requires that students understand concepts and operations and their rela-



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tions to each other; compute math procedures efficiently and correctly; apply strategies and formulas to problems correctly; and understand the reasons that underlie the solutions to a problem and transfer them correctly to new problems.

Beyond those cognitive skills, students also need to see math as useful and doable, as well as necessary to their progress as learners.

Here are five research-aligned strategies and techniques to help all students learn math.

- Screening.** Experts estimate that 5 percent to 8 percent of students have developmental dyscalculia, a learning disability associated with severe, persistent difficulty in math. That's roughly the same share as students who have dyslexia, a learning disability that affects reading. And roughly 25 percent of students have severe math anxiety, which can also significantly impair math learning. Yet, significantly fewer students are assessed for dyscalculia than dyslexia and even fewer for math anxiety. Early and systematic screening for both cognitive and mental health-related math challenges can help teachers intervene more effectively with struggling students.
- Fact fluency.** Even in an age of universal calculators, all students need to develop automatic, fluent recall of basic math facts, such as addition/subtraction or multiplication tables. Interventions for students struggling in math at any grade—not just elementary levels—should include at least 10 minutes per class dedicated to building fluency in basic math facts. Recall, however, should be practiced in the context of learning the concepts underlying these facts (e.g., the links between addition and multiplication or the relationships between variables in an equation).
- Making connections.** Math concepts build upon each other, and there's strong evidence that students need explicit, systematic instruction to understand how foundational concepts connect to each other. Students should have regular opportunities to discuss and justify different approaches to solving problems, and teachers should encourage them to think about the underlying logic of their approaches.
- Monitoring and reflection.** Students who start the school year performing below grade level in math have been found to improve faster than average with interventions, but often the pace is still not quick enough to catch up with

higher-performing students by the end of the school year. Both teachers and struggling students should regularly monitor student progress to identify the most important skills and concepts needed to continue to learn grade-level content.

- **High-dosage tutoring.** Instruction that takes place one-on-one or in very small groups and is provided by a trained teacher or tutor at least three times a week, or for about 50 hours a semester, has been shown to be the most effective approach to accelerating student learning in math. But only 10 percent of students—and only 2 percent of students who struggle most—receive math support at that level. Coordinating schedules, lesson-planning time, and other supports for teachers to incorporate such tutoring into the school day can boost its effectiveness and sustainability. ■

**Additional Resource** 

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## Here's What Makes Tutoring Work For Academic Recovery

By Olina Banerji

Washington, D.C.—

**T**he news about the reading and math skills of K-12 students nationwide is dire: Academic recovery after the pandemic has stalled in the case of mathematics, and reading scores have hit a new low, as reported by the National Assessment of Educational Progress. Students in high-income districts have progressed much faster than those who come from low-income ones, widening gaps among groups of students.

Between the doom-and-gloom, though, there were a few signs of growth to celebrate, like in Louisiana, Atlanta, and Ector County, Texas. While bright spots may be few and far between swathes of students who are struggling to perform at grade level, they reveal a key connection between academic achievement and the resources spent on tutoring students either in school, after school, or during the summer.

There might be hard-nosed evidence in favor of high-impact and high-dosage tutoring, which is generally defined as regular one-on-one tutoring or tutoring in very small groups, but two specific things threaten its continuation in schools, experts said. One, pandemic-era aid has stopped; and two, pub-

lic schools are staring in the face of budget cuts due to enrollment changes and shifting federal priorities.

These changes could put the future of high-dosage tutoring, along with other academic interventions, in jeopardy.

States will soon have to prioritize how they want to spend their resources, said Kunjan Narechania, chief executive officer at Watershed Advisors, an education consultancy firm that partners with states to generate and implement education reforms. She spoke on panel convened here on Feb. 12 by Accelerate, a national nonprofit that promotes evidence-based tutoring interventions.

"I hope that states are really scrutinizing where their dollars are going and making choices to redirect dollars to strategies that are evidence based," she said. "If you ask me if that's going to happen wholesale, I think we're going to see significant variation [between states], just as we did with [pandemic-era] spending."

### Successful tutoring needs a supportive ecosystem

Narechania said on the panel that for tutoring efforts to succeed, they must be part of a larger vision that a district or state has around student success. An "anchoring" vision could

then help decide what kind of training teachers need, what kind of data and feedback systems need to be put in place, and what instruction will look like.

States have to decide "what they want their children to experience differently," Narechania added.

Louisiana, which ranked second among states in math recovery and first in reading in the recent NAEP results, followed such an approach. Louisiana's 4th graders are scoring higher in reading now than they were before the start of the pandemic—the only state that's made statistically significant progress in that area since 2019.

The work of aligning tutoring to students' academic needs dates back to the 2020-21 school year, when Louisiana implemented a K-3 literacy screener, said Kelly Bottger, the executive director of Louisiana Kids Matter, an advocacy group that works with the state government on education policy.

Bottger said on the panel that the literacy screener became a way to introduce high-dosage tutoring for students who were reading below grade level—a substantial 75 percent.

Over three years, that number has come down to 25 percent. "We've come a very long way in a short amount of time with kids who were negatively impacted, because they were in 1st grade at the time of the pandemic," Bottger said.

To ensure that pandemic-relief aid went toward supporting literacy interventions, Bottger said the state's education department created a dashboard that tracked what districts were spending their funds on, and how much went to efforts like tutoring.

Added Bottger: "It was public accountability, ... the districts didn't want to look they were [only] putting in football fields. They started spending money on high-dosage tutoring interventions and literacy training."

Louisiana received \$4 billion in federal pandemic relief for K-12 schools—or roughly \$5,700 per student—which is more than the national average of \$3,700 per student, according to the Education Recovery Scorecard.

The screener, the accountability measures, and the in-school tutoring were all part of a larger "package" that aimed to bring reading scores up. Additionally, the Pelican State also gave parents \$1,000 dollars to spend on digital tutoring options, if their children needed additional support in math and reading. That amount was increased to \$1,500 in 2024.

Now, 20,000 people have enrolled in that

program and double that number are on the waitlist, said Bottger.

Louisiana is now keen to introduce a K-3 math screener, alongside the one for literacy. “The thinking is that if it [the interventions] worked for literacy, it should work for math,” said Bottger.

Tutoring is now more in the hands of states than ever, said Narechania. States like Louisiana, Tennessee, and Virginia have included tutoring as part of their larger vision to benefit students.

For example, Narechania said Virginia has purchased different tutoring options which are offered as part of the Multi-Tiered System of Supports in schools, or other types of interventions.

“When tutoring becomes part of the system, then you can see things sustain,” she said. “But it’s not the norm yet.” ■



Enis Aksouy/Digital Vision Vectors

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## Districts Recovering From An Achievement Slide Have This in Common

By Sarah Schwartz

**O**n the heels of the recent disheartening results on the test known as the nation's report card, another analysis adds some nuance to the overarching story of a downward slide in student achievement.

Though students are still behind their pre-pandemic peers in math and reading, there are a number of districts across the country that have bucked these trends. In part, this could be related to how school systems used federal COVID-relief funds. In at least one state, districts that spent more of those dollars on academic recovery saw greater student progress.

The findings are the latest release from the Education Recovery Scorecard, a project from researchers at Harvard and Stanford universities that tracks pandemic-related learning loss at the district level across the country. To make comparisons across districts, the analysis combines state test scores for nearly 40 million students across 43 states from 2019, 2022, and 2024 with data from the National Assessment of Educational Progress.

"That high-resolution picture is much more informative for district leaders, for parents, for local communities, and for state leaders who want to know where are the bright

spots and the trouble spots in their state," said Sean Reardon, a professor in Stanford University's Graduate School of Education, and an author of the new report.

The district-by-district portrait reveals some troubling trends.

School systems where family income is highest are almost four times as likely to see full academic recovery for students, in both reading and math, than school systems where more students come from low-income families. And both within districts, and between districts, socioeconomic and racial gaps in math achievement are growing.

The more granular, district-level analysis also complicates state-level NAEP results.

Alabama, for example, was the only state to have made gains beyond its pre-pandemic 4th grade math scores on NAEP. On average, low-income districts in the state made more progress between 2022 and 2024 than high-income districts. Still, more than a third of students are in districts that haven't recovered in 4th grade math.

### What role did pandemic-relief aid play?

Across the country, students still have a lot of ground to make up, the researchers found. Compared to students in the same grades be-

fore the pandemic, students in spring 2024 were about half a grade level behind in both reading and math using the Education Recovery Scorecard's composite measure.

When NAEP reported similarly lagging scores in January, some observers asked why achievement hasn't rebounded further, given the infusion of \$190 billion in federal money for recovery.

But that's not the right question, said Reardon: "The appropriate way to think about it is the counterfactual—if we hadn't spent the money, would it have been even worse?"

The Education Recovery Scorecard analysis suggests that ESSER funding did, in fact, "prevent larger losses" in low-income districts. There, the researchers calculated, the federal dollars had about as much influence on student achievement as a general revenue increase—a marginal boost in test scores, but one that could translate into higher lifetime earnings.

The researchers were also able to evaluate whether spending more money specifically on learning recovery, like providing tutoring or expanding summer school, led to a greater bang for the buck.

In California, where the state maintained detailed data on how districts used their funds, this seemed to be the case—districts that allocated more than the 20 percent of funds required to go to academic interventions saw more improvement in test scores.

It would be "unreasonable" to extrapolate that districts should have spent 100 percent of the funding on academics, said Reardon. Other uses, from building safety upgrades to mental health services, likely had positive effects that can't be measured in test scores, he said.

Still, the finding implies there would have been more academic recovery if other districts spent more on interventions, said Thomas Kane, a professor of education and economics at the Harvard Graduate School of Education, and an author on the report.

The report recommends that states and districts find the money to continue the learning recovery programs that pandemic relief aid previously paid for, and "double down on the academic catchup efforts."

### Lessons from one district that's defied the downward trend

That's what the Ector County schools in Texas have done.

The 33,000-student district, where 75 percent of kids qualify for free or reduced-price lunch, is one of a small number of districts

serving a large majority of students from low-income families that have brought students back to pre-pandemic achievement levels.

Only about 4 percent of districts in the bottom 10 percent of the income distribution in the Education Recovery Scorecard sample have recovered in both math and reading.

In Ector County, a tutoring program that served 6,000 students, paid for through COVID relief funds, is now supported through general funds, said Scott Muri, the former district superintendent who left the position in January.

Before the pandemic, the district had already shaped an “aggressive strategy” to improve student academic outcomes, Muri said. Ector was in the process of launching an outcomes-based tutoring program, which tied compensation for the tutoring companies to student achievement, and had already begun implementing a staffing approach that incentivized the highest-performing teachers to go to the lowest-performing schools.

Having a “clear vision” in place before the federal money started coming in helped Ector apply it immediately, Muri said. Instead of the outcomes-based tutoring program reaching a few hundred students, for example, it served thousands, he said.

“The dollars helped us simply accelerate that strategy,” Muri said. ■

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## High-Dosage Tutoring Should Be Here to Stay

Research is piling up on the effectiveness of the academic intervention

By Alan Safran & Susanna Loeb

**A**merican parents care deeply about their local schools and are committed to improving education. That's because Americans know that education plays a crucial role in shaping our children's future. So the ultimate question is not "should we improve public schools" but "how"?

While the news headlines about the latest National Assessment of Educational Progress felt grim, bright spots bucked the national trends in exciting and promising ways and beg for our attention. These bright spots point us in the right direction, if we're willing to learn from them.

NAEP shows that, nationally, student achievement in both math and reading remains below pre-pandemic levels and that the gap between high- and low-performing students is widening. But it also shows successes. Students in Louisiana have made unexpected gains—performing better than they had in 2019, and the state's ranking in 8th grade reading has shot up from 42nd to 16th.

Similarly, 4th and 8th grade students in the District of Columbia performed on average at or above "proficient" levels in both math and reading, and a higher proportion of students moved from "below basic" to "basic" and from basic into proficient and "advanced."

NAEP describes achievement gains and losses; it doesn't tell us what caused those changes. However, research in districts across the country has produced good evidence on approaches that are driving academic gains for students. One intervention has consistently stood out and, in the case of Louisiana and the District of Columbia, has been a pillar of their pandemic-recovery plan: high-dosage tutoring, also known as high-impact tutoring.

Since the start of the pandemic, as many as 80% of U.S. school districts have launched or expanded tutoring programs, investing an estimated \$7.5 billion to bring tutoring to millions of students for the first time. At schools that offered high-quality sessions at least three times a week from a consistent tutor seeing just one student or a very small group at a time, students saw their academic achieve-



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ments skyrocket, recovering on average as much as four months in literacy and nearly 10 months in math over a school year.

The impact of tutoring is felt in every corner of the country: Schools in rural North Carolina counties are tutoring multilingual learners, and New Mexico is providing math tutoring for rural middle schoolers. Meanwhile, Arkansas is building a statewide tutoring corps, and South Dakota is rallying retired teachers to tutor Indigenous students.

Research is piling up, showcasing how high-dosage tutoring has been effective, even when programs have been expanded beyond a pilot stage to operate across multiple schools, serving thousands of students. Saga Education's high-dosage tutoring has been implemented within 43 high schools, and the company has supported the Chicago Public Schools Tutor Corps implementation in over 100 schools. Over 20,000 students have been reached.

To be effective, large programs need to maintain a high-quality approach as they grow, and many have. One analysis found that large-scale tutoring programs yield months of additional student learning in a year—more than educational interventions like summer school, class-size reduction, or even extended school days.

It is a rare intervention that parents, teach-

ers, and school leaders alike agree on. But they agree on tutoring. Even as federal pandemic aid has dried up, many states—including Louisiana, Tennessee, Maryland, and Michigan—have chosen to continue investing hundreds of millions of dollars in high-dosage tutoring. In Virginia alone, legislators approved a \$418 million increase to the fiscal 2024 state budget for academic recovery, with the vast majority earmarked for high-impact tutoring for students who are furthest behind academically. The effort was organized, in part, by Nicholas Kent, a former deputy education secretary for Gov. Glenn Youngkin, who the White House recently tapped to serve as undersecretary of education.

When the Trump administration elevates leaders who have endorsed the effectiveness of tutoring, it sends a message of widespread confidence in the intervention. Kent would not be the only high-ranking U.S. Department of Education official who hails from a state that's anchored its recovery efforts in high-impact tutoring.

Penny Schwinn, a former state superintendent of Tennessee now awaiting confirmation as the deputy secretary of education, partly built her reputation by launching a statewide tutoring initiative to accelerate recovery from the pandemic. Under her leadership, the state also strengthened its teacher pipeline and

overhauled literacy instruction. The state is among a handful where reading proficiency exceeds pre-pandemic levels.

Meanwhile, Kirsten Baesler of North Dakota, the nation's longest-serving chief state school officer, is awaiting confirmation as the assistant secretary for elementary and secondary education. In North Dakota, she oversaw the implementation of high-impact tutoring efforts focused on the lowest-performing 20% of students as well as established a math-acceleration program for students in grades 3-8.

The new administration—alongside school systems, policymakers, and philanthropic leaders—has a critical opportunity to prioritize and scale up high-impact tutoring as a cornerstone of educational recovery and long-term success. The evidence is clear: When it is done right, high-impact tutoring works and can help millions of students. We can realize this potential—a new generation of confident, successful learners—if policymakers embrace what we have learned and commit to embedding high-impact tutoring into U.S. schools for the long run. ■

*Alan Safran is the CEO and co-founder of Saga Education, which helps states and districts with tutoring best practices. Susanna Loeb is the founder and executive director of the National Student Support Accelerator at Stanford University and a professor at the Stanford Graduate School of Education.*

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