STRATEGIES TO SOLVE UNFINISHED LEARNING

Targeted Intensive Tutoring

Expanded Learning Time

The Importance of Strong Relationships

The Education Trust

mdrc
BUILDING KNOWLEDGE
TO IMPROVE SOCIAL POLICY

Strategies to Solve UNFINISHED LEARNING

WHEN THE PANDEMIC FORCED SCHOOLS ACROSS THE COUNTRY TO CLOSE THEIR DOORS IN MARCH 2020, many district and school leaders worked quickly to plan for and address students' "unfinished learning."[1] How would they support students who had been exposed to content, but had not yet had a chance to master it? A recent study indicated that students, on average, could experience up to five to nine months of unfinished learning by the end of June 2021. But it will be sometime before we know the true amount of unfinished learning caused by schools closing their doors.

What is certain, however, is that as the nation continues to battle this pandemic and at-home learning continues, there will be a need to help students, especially the nation's most vulnerable students, complete unfinished learning for weeks, months, and even years to come. The lack of adequate time for districts to prepare for sudden shutdowns as well as the lack of resources for many districts, especially those that are chronically underfunded, to adjust to virtual learning has exacerbated inequities for Black, Latino, and Native students and students from low-income backgrounds.

For example, a national survey of school leaders revealed that students in high-poverty districts were expected to spend far less time on instructional activities during virtual learning than were their peers in low-poverty districts. More specifically, 24% of leaders in high-poverty districts compared to just 12% in low-poverty districts said that distance learning for elementary school students primarily involved content review rather than teaching new material.

Families, especially in communities with more students from low-income backgrounds, more English learners, and more students of color, also face many obstacles to participating in distance learning opportunities, for reasons ranging from inadequate access to technology to competing responsibilities such as jobs or childcare that limit the time available to focus on learning. It is most important to note that these inequities are not limited to the current crisis; they are longstanding.

Moving forward, educators will need to administer high-quality assessments to determine where learning must be accelerated and provide high-quality instruction to ensure students have the opportunity to reach high standards. Students will need access to opportunities, supports, and strong and supportive relationships. And targeted actions from school and district leaders and policymakers are required to ensure stretched budgets do not result in policies and practices that harm the students who face the most injustices.

The degree of unfinished learning caused by the pandemic will differ by student, subject, and grade — affecting math more than reading, younger grades more than older, and students already lacking adequate supports more than others. Research supports two ways schools can give students the opportunities and supports they need to complete unfinished learning: **targeted intensive tutoring and expanded learning time**. The Education Trust and MDRC designed the following briefs to help leaders make decisions on how to implement these strategies and where to invest resources, especially in ways that best support the country's most underserved students. We also highlight research-based interventions to **build and maintain strong relationships**: without strong relationships and connections between students and school staff, educators cannot catch students up. Finally, when evidence exists, we highlight the tradeoffs between effectiveness, affordability, and feasibility when implementing a strategy in different ways.

As we navigate these unprecedented times, it will be even more important that investments are made to grow the evidence base and evaluate the effectiveness of programs used to accelerate learning.

1.The Education Trust uses the term "unfinished learning," as opposed to "learning loss" or "learning gaps," to describe material that should have presented to students, but has not yet been mastered. The idea that learning is not complete better reflects the reality that all students can learn and "gaps" can be closed with equitable opportunities, materials, assessments, and high-quality instruction. With this phrasing, our goal is to redirect any focus on "fixing students" toward a focus on systemic changes to meet the needs of students.

Targeted Intensive TUTORING

AS THE NATION CONTINUES TO BATTLE THE COVID-19 PANDEMIC AND AT-HOME LEARNING CONTINUES, there will be a need to help students, especially the nation's most vulnerable students, complete unfinished learning for weeks, months, and even years to come.[1] Research shows targeted intensive tutoring can help historically underserved students to catch-up to meet high standards. District leaders should follow the research and invest in evidence-based methods to support students to get back on track.

Targeted intensive tutoring, often referred to as high-dosage tutoring, consists of having the same tutor to work over an extended period of time (e.g., all year, every school day) on academic skills, such as math or reading. In the most effective versions, an individual tutor works with one or two students at a time, using a skill-building curriculum closely aligned with the math or reading curriculum used throughout the school and targeted to the student's academic needs.

WHAT DO WE KNOW ABOUT WHAT WORKS?

District and school leaders considering implementing targeted intensive tutoring as a strategy to help students catch-up will have to make important decisions about hiring, staffing, and training. They also will need to make decisions around grouping, scheduling, and the curriculum. With each decision, district and school leaders will have to balance what the evidence says is most effective with what is most feasible given resource constraints and local context.

HOW EFFECTIVE IS INTENSIVE TUTORING?

We looked at the research to help leaders navigate complicated decisions.[2] The chart below shows how implementing various features of intensive tutoring impact its effectiveness.

Features	More Effective			Less Effective
Tutors	Certified teachers	Paraprofessionals	Trained volunteers	Peers
Student: Tutor Ratio	1-2: 1			3-4:1
Curriculum	Skill-building curriculum			Homework help
Training and Supervision	Pre-service & ongoing training & supervision	Pre-service training & a single additional supplemental training	Pre-service training only	No training
Location	During the school day complementing the regular class	During the school day substituting for the regular class		After school/ out of school
How often & How Long	All year, every school day for an hour			Partial year
Target Population	Younger students			Older students

CRITICAL QUESTIONS FOR LEADERS:

Which students benefit most?

*Targeted intensive tutoring **is effective for all students**, but research shows that younger students benefit the most. The research also shows:*

- Targeted intensive tutoring is very effective for pre-K and kindergarteners, since a month of teaching advances a child's learning so much at that age.[3]

- Although younger children make the most gains, targeted intensive tutoring **can also be effective for middle and high school students**.[4]

- At its most effective, **targeted intensive tutoring can double the amount of learning** students typically gain during the school year. [5]

Who should take on tutoring responsibilities?

The most effective tutors are teachers or those with the most experience and training. The research also shows:

- **Tutors with more experience or training** in teaching or working with young people are the most effective.[6]

- **Paraprofessionals** (non-teachers who are hired, often full time, and trained for the job) are almost **85% as effective as teachers**, while being less expensive.[7] **AmeriCorps members** can have a positive impact on students' attendance and academic outcomes, when they are well trained and use an asset-based model to focus on students' social-emotional development, academics, and creating an inclusive environment.[8]

- In general, **volunteers are half as effective as paraprofessionals**.[9] However, volunteers also are the least expensive tutors.

- Volunteer attendance can especially be an issue for volunteering college students.[10]

How many students should be placed with a tutor at a time?

Research shows that two students per tutor is the most efficient and effective way to accelerate learning. Also, it shows no more than four students should be placed with a tutor at a time. The research also shows:

- One student per tutor allows for individualized instruction, but [Match Corps,](#) for example, found that the **tutor's time can be used more efficiently by placing two students with a tutor at a time**.[11]

- When there are more students who need individualized tutoring than there are tutors, some schools have placed three or four students with a single tutor. However, without specialized training, **it can be more challenging to effectively and positively manage behavior with groups of three to four students.**[12]

- Therefore, **it is even more important to ensure tutors with larger groups have high-quality, positive classroom management training**.

What kind of training and materials should schools provide?

The curriculum used during intensive targeted tutoring should be aligned to the curriculum used throughout the school. Tutors who are less familiar with the curriculum should receive ongoing training and support from more experienced educators. As always, the curriculum and instructional materials must be aligned to high standards, appropriately challenging for students' grade level, and be culturally sustaining.[13] The research shows:

- All tutors should **be trained to appropriately adjust the lesson to match a student's level of understanding and be trained to use materials in culturally sustaining ways**.[14]

- Tutors who are less familiar with teaching and who have less training can **benefit from more specific directions like a highly structured curriculum, which can help them effectively present material.**[15]

- Tutors who are not teachers and who have received the least amount of training **should be adequately supported by more experienced educators**.[16]

- All tutors should receive pre-service training that covers the goals of the curriculum, strategies for managing individual or small tutoring sessions, as well as instructions around key program features and guidelines. **Training should also ensure that tutors build relationships with students and setting high expectations early on**.[17]

- It also is helpful to provide tutors who are teachers some training on the specific goals of the curriculum.[18]

- Throughout the course of tutoring programs, **ongoing training and individual coaching should be used to strengthen tutors' curriculum delivery**.[19]

When should educators tutor students?

Intensive targeted tutoring may require adjusting the school day schedule. Educators should tutor students during block of times when students do not have core classes like math or reading. But it is important for students to engage in elective courses and have an adequate break or lunch period – students who perceive tutoring as a punishment may disengage. The research shows:

- Tutoring done outside the school day is about **two-thirds as effective as that held during the typical school day**.[20]

- School-day pull-out programs are **less effective than if the tutoring is in addition to the regular math or reading class**.

- If the tutoring sessions are after school (and thus voluntary), **attendance may be strong for elementary school students (because it is serves as childcare for the parent), but attendance is more challenging for older students.**[21]

How often should students have tutoring sessions?

Students should receive tutoring frequently and regularly throughout the school year. All students who have not yet mastered math and reading standards should receive intensive targeted tutoring. Research also shows:

- Providing **more tutoring** sessions positively increases impact.[22]

Resources are limited. Which subject should tutors prioritize?

All students who have not yet mastered math and reading standards should receive intensive targeted tutoring. But schools without the resources to provide tutoring in math and reading should consider prioritizing providing intensive targeted tutoring in math. This is because students are more likely to experience [more unfinished learning in math]. It is also worth noting that successful completion of high school math courses [increases earnings for students of color]. Research also shows:

- **Students in grades 2-12 benefit most from tutors who focus on math, although reading tutoring also has positive effects**. impact of reading tutoring is greatest for students in pre-K to first grade.[23]

- Intensive tutoring in math helped high school students to **improve grades in other courses too**.[24]

- Little is known about the effectiveness of intensive tutoring in the virtual setting, however, a research study found that a virtual tutoring program that offered 30-45 minutes of tutoring a week improved literacy.[25]

PROMISING PRACTICES

New York City High Dosage Tutoring Middle School Pilot in Reading

In New York City, 1,700 students across 60 public schools participated in a randomized experiment to test the effectiveness of intensive tutoring. Middle school students who were identified as readers in need of support were put into groups of four and received 45 to 60 minutes of daily tutoring with a trained and supervised paraprofessional educator. The tutors used a tailored reading curriculum centered on high-interest chapter books (fiction and non-fiction) that were appropriate for the students' reading level. After attending an average of 67 days of tutoring, students gained an additional month or two worth of learning in reading. Although the program has positive effects, it is costly ($2,500 per participant).[26]

Saga

During the course of this program, two students met with one tutor during a one-hour daily tutoring session as part of their regular class schedule. Tutoring sessions split instructional time evenly between reviewing foundational skills based on the unfinished learning of individual students and working through the content of the students' current math classes. These tutoring sessions occurred during the typical school day and replaced either a second period of math or an elective course. A recent study found that the program doubled, or even tripled, how much math students learned in a year and that the benefits for students persisted at least one or two years after tutoring.[27]

Reading Partners

Reading Partners is a one-on-one tutoring program to help students in kindergarten through fourth grade who have been identified as experiencing two years of unfinished learning in reading. Over the last two decades, the program has expanded to serve over 60,000 students in 400 schools in 80 districts. Trained volunteers and AmeriCorps members tutor struggling readers in elementary schools serving students from low-income backgrounds. Tutors are trained on curriculum, trauma informed responses, and anti-bias practices before meeting with students. Students are placed with an individual tutor twice a week for 45 minutes each session. Each reading partner volunteer tutor receives a scripted curriculum and ongoing support from a more experienced tutor.

Reading Partners assesses student progress three times during the school year and surveys teachers twice each year to ensure high-quality instruction. Evaluations show that these tutoring sessions added an additional one and a half to two months of growth in literacy. Studies also show that this program may be particularly effective for the lowest achieving students, as the students that started the program in the lowest quartile experienced double the impact. Reading Partners charges schools $320 per student. The school provides in-kind resources (primarily space) of about $390 per student. Although the program has faced challenges such as attendance of tutors and retention of students, it has been shown to have a positive impact.[28]

While students are learning from home, Reading Partners has continued tutoring in a virtual setting. The program has also increased outreach to communities and families by incorporating virtual home visits, texting literacy tips, and providing literacy workshops for caregivers.

Targeted Reading Intervention

Targeted Reading Intervention (TRI) is a one-to-one tutoring model to support early readers, especially in rural schools. Classroom teachers work individually with developing readers in kindergarten and first grade for 15 minutes each day, focusing on oral language, decoding, writing, comprehension, vocabulary, and fluency skills. Research shows that the program has a significant positive impact on students' phonological awareness and vocabulary. University-based instructional coaches use webcam technology to train and provide ongoing support to teachers, highlighting how training could be delivered electronically while learning is remote and for isolated, rural communities.[29]

Number Rockets

Number Rockets is a tutoring intervention for first graders experiencing unfinished learning in math. Students are placed in groups of 2-3 students, three times a week for 40-minute sessions during the school day (30 minutes of scripted instruction and 10 minutes of practice) for 17 weeks. These sessions do not replace but supplement students' core math classes. In preparation for tutoring sessions, tutors receive one day of training that typically costs schools and districts $1,500 per tutor and an additional two-hour training after that. Tutor training workshops include program information, an overview of background research and theory, trainer modeling, practice, and observations. The evaluation of this program has found it to be very effective for students who have yet to master math concepts. It is important to note that most of the tutors during this evaluation period held a teaching certificate (66%), and even more (77%) of the tutors were retired or substitute teachers.[30]

ENDNOTES

1. The term "unfinished learning" is used to more positively describe the content that should have been covered but has not yet been mastered. The Education Trust uses this term to highlight the need for a mindset shift –all students can learn and "gaps" can be closed with equitable opportunities, materials, assessments and high-quality instruction. Instead of focusing on negatives like "lost learning" and "gaps," this term aims to highlight the continued need for growth and systemic changes.

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19. Garcia et al., 2020.

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