K-8 Math Intervention Buying Guide

prepared by SpringMath by Sourcewell

Math isn't just for mathematicians

Being proficient in math is an important predictor for academic success, career opportunities, and long-term earnings. With this in mind, we must prioritize helping all students develop both proficiency and fluency in their math skills. If your current math curriculum isn't meeting this goal, a supplemental math intervention may be necessary.

Investing in quality, research-based intervention solutions supports effective instruction. District and school leaders can use this buying guide to better understand the benefits of math intervention and select programs that meet the specific needs of their students.

Understanding math intervention

Often tied to a multi-tiered system of support (MTSS), math interventions help bridge gaps in instruction, reinforcing and supplementing the curriculum to support students in reaching subject mastery. Interventions can be provided to small groups of students, or at the classroom level.

A. What is MTSS?

Multi-Tiered System of Supports (MTSS) is a proactive framework that provides tiers of academic and behavioral strategies to support student progress. The four components of MTSS are screening, progress monitoring, a multi-level prevention system, and data-based decision making.

B. What is individual math intervention?

Some children do not progress as expected, even though they participated in high-quality curriculum and received small and large group support. For these children, more intensive, individualized instruction is needed.

C. What is classwide math intervention?

Research has shown that classwide intervention is a highly efficient and effective form of intervention. Originally based on Greenwood's classwide peer tutoring, common models include:

a) Peer Assisted Learning Strategies
b) SpringMath Classwide Intervention

D. Should every district have a math intervention program in place?

Supplemental intervention programs can complement any core curriculum, providing support to help every student succeed.

When implemented at the district level, math intervention programs help increase overall math scores, meet state standards, and accelerate student growth.

State standards for a program

Math intervention programs are useful for ensuring districts are able to meet (or exceed) state standards.

An effective math intervention program will reinforce the Common Core Standards for Mathematical Practice:

A.	Make sense of problems and persevere in solving them
B.	Reason abstractly and quantitatively
C.	Construct viable arguments and critique the reasoning of others
D.	Model with mathematics
E.	Use appropriate tools strategically
F.	Attend to precision
G.	Look for and make use of structure
H.	Look for and express regularity in repeated reasoning

The pandemic has led to increased focus on the quality of instruction and learners' academic progress. Investing in standards-aligned solutions will help reinforce the decisions of administrators, principals and teachers.

Features of a quality math intervention program

When seeking out a math intervention program, it's important to consider which solution will best meet state standards but more importantly the specific needs of your district. Use the following checklist to evaluate programs during your search:

A transparent logic model

Does the program specify exactly what the mechanism of action is for what type of student outcomes?

Cost effectiveness data comparison

How does the program ensure a positive return-on-investment? Has the vendor measured and reported what it costs to attain learning improvements in math using their program?

Published evidence of assessment accuracy, utility, & intervention efficacy

Is there primary, published research investigating the accuracy, utility, efficacy, equity, and cost of the math intervention program?

Coaching feedback loop

Does the program use student learning gains to direct coaches to support math interventions?

Design linked to implementation science

Is the implementation of the program preceded by supports, like recommendations for intervention dosage and use?

Published dosage & integrity data

Are the effects of interventions evaluated in tandem with intervention use?

Math solutions and programs: What's available?

There's a wide variety of math solutions and programs available on the market, many of which are complementary to a math intervention program. Here are some examples:

Approach	Example solutions
1. **Adaptive Math Games/Activities:** Activities that adjust according to a student's skill level	DreamBox® Learning, Woot Math
2. **Free Math Courses and Videos:** Websites that provide math support and guidance in the form of videos and other lessons	Khan Academy, Math Playground
3. **Math Assessment Creation Tools:** Used to create quizzes and exams, often related to state assessments	Edulastic, Edcite
4. **MTSS Math Assessment Solutions:** Fit into a multi-tiered system of support (MTSS) and provides tools for screening and progress monitoring	FastBridge
5. **Comprehensive Math Achievement Program:** A comprehensive math achievement program will fit into an existing MTSS, and provide tools for universal screening, assessment, progress monitoring, and classwide or individual interventions.	SpringMath®

Accelerate student achievement with math interventions

Classwide math interventions are a research-based, cost-effective way to accurately screen students and close the math achievement gap. This style of intervention is built upon a peer-to-peer tutoring model, which has been proven to help students build confidence in math. Similar to individual student interventions, classwide interventions are used to help a group of learners attain mastery. Progress should be monitored from week to week to assess growth and provide individual interventions as needed.

With the information provided in this guide, district and school leaders are better equipped to evaluate and select math intervention programs that meet the needs of teachers and students alike.

About SpringMath

SpringMath is a research-based, easy-to-implement math intervention solution that's proven to accelerate achievement for all K-8 students. Developed in collaboration with a nationally-renowned educator, the company's highly interactive platform combines tools for assessment, intervention, and progress monitoring to help teachers provide a clear path to math achievement for every student.

Every student is unique. That's why SpringMath meets learners where they are, and creates personalized plans to help them achieve mastery. Our paper and pencil model helps students work through math problems, and simplifies the grading process for teachers, and our peer-to-peer, classwide interventions ensure every student has ample opportunities to learn.

Teachers are at the heart and soul of our model. SpringMath enables teachers to pinpoint exactly what a student needs, and identifies multiple options for providing support. No matter the goal or situation, SpringMath is prepared to help schools accelerate math achievement for every student.

SpringMath has evaluated classwide intervention as a second screening gate with excellent results and these data are published and also **rated on NCII**. Learn how SpringMath is helping districts **close the math achievement gap through classwide intervention**.

Ready to take the guesswork out of math intervention?

Take a quick peek at how you can with SpringMath in this short video: sourcewell.co/guesswork

Contact us at: springmath.org | info@springmath.org

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