

Math Intervention Toolkit



Four Steps to Set Students up for Math Success

Educators understand the importance of building solid foundations. With this in mind, we compiled four essential steps for setting students up for math success. Use these strategies to support every learner.

1. Show empathy

Empathy is defined as the ability to sense other people's emotions, coupled with the ability to imagine what someone else might be thinking or feeling. For an educator, this means taking into account the perspective of a student and setting judgment aside to form understanding. To teach mathematics with empathy, a teacher might start by nurturing a supportive community within the classroom.

Try it: [Teaching with Empathy](#) (Understood.org)
[7 Ways to Cultivate Joy and Empathy in Math Class](#) (Greater Good Magazine)

2. Use evidence-based resources

Selecting the right mix of instructional strategies and supplemental resources is essential for student success. District and school leaders must consider the importance of adopting evidence-based practices, or instructional skills, techniques, and strategies that a study or experiment has proven to be effective. Encourage educators to seek out proven methods – your students deserve it.

Try it: [Belief-based Versus Evidence-based Math Assessment and Instruction](#)
(Amanda VanderHeyden & Robin Coddington)
[Intensive Intervention in Mathematics Course](#)
(NCII)

3. Collaborate with families

Building relationships with students' parents and/or guardians is important for helping them understand the importance of math success. Hosting virtual or in-person “math nights” is just one way that teachers can foster those connections. Regularly sharing a student's progress is another.

Try it: [Engaging Families for Math Success](#) (IES REL)
[Making Math a Family Thing](#) (Harvard GSE)

4. Build math confidence

Focusing on math confidence is one of the most crucial parts of setting students up for lifelong success. The way a teacher or parent discusses math is critical to a child – keeping a positive attitude can help them flourish. Educators are also building math confidence through culturally sustaining teaching practices, and finding new ways to discuss progress with students.

Try it: [The Passion & Science of Math](#)
(Homework is Stupid)
[How to Build Students' Math Confidence with Culturally Sustaining Practices](#) (KQED Mind/Shift)

Roundup: Free and Paid Math Intervention Resources for Teachers

There's a variety of supplemental math tools, programs, and other resources out there. To save you time, we compiled a list of free and paid solutions to consider using in your district, school, or classroom.

Free math intervention activities

Khan Academy: Practice exercises, instructional videos, and other course materials.

- [khanacademy.org](https://www.khanacademy.org)
- Grades: K-12; higher education
- Platform(s): Web browser

Illustrations: Created by the National Council of Teachers of Mathematics (NCTM), this site provides lesson plans for teachers and activities for students.

- [illustrations.nctm.org](https://www.illustrations.nctm.org)
- Grades: PreK-12
- Platform(s): Web browser

CK-12: Digital textbooks ("Flexbooks"), webinars, activities and other course content for teachers and students.

- [ck12.org/teacher](https://www.ck12.org/teacher)
- Grades: K-12; higher education
- Platform(s): Web browser

Todo Math: Standards-aligned games that are good for daily practice. Base app is free; paid subscriptions also available.

- [todomath.com](https://www.todomath.com)
- Grades: PreK-2
- Platform(s): App Store; Google Play

BrainPOP: Educational videos, interactive quizzes, activities, and games to supplement instruction; rotating set of free content, paid subscriptions available.

- [brainpop.com](https://www.brainpop.com)
- Grades: PreK-8
- Platform(s): App Store; Google Play

Paid math intervention programs

SpringMath: Research-based, comprehensive math achievement solution that includes tools for universal screening, assessment, reporting, and student interventions (classwide + individual).

- [springmath.org](https://www.springmath.org)
- Grades: K-8
- Platform(s): Web browser; printable materials/activities

Math Nation: Instructional videos, practice worksheets, and teacher/student discussion boards.

- [mathnation.com/us](https://www.mathnation.com/us)
- Grades: 6-12
- Platform(s): Web browser; App Store; Google Play

DreamBox Learning: Adaptive games for teaching mathematics standards.

- [dreambox.com](https://www.dreambox.com)
- Grades: PreK-8
- Platform(s): Web browser; iPad

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](https://www.springmath.org) | info@springmath.org

