

Why Early Math Matters: Building Futures with Progressions
Your child's math journey today shapes the opportunities they will have tomorrow! Our priority is confidence, flexibility, and a love for math!

Math Looks Different Today From When You Were in School – for Good Reason

Math used to mean memorizing steps and practicing them again and again. Today, research shows kids learn best when they understand the why behind the math, not just the how. Progressions by Alba Math gives students chances to explain their thinking, use strategies, and see how numbers connect. Built on decades of research, it helps children grow problem solving skills, reasoning, and confidence—foundations for success in school and life.

The STEM Challenge

- Fewer than 40% of students who start college in a STEM major finish in that major.
- Research shows that nearly half leave STEM because math feels overwhelming, even if they were strong students in earlier grades.
- The gap usually traces back to early foundations, when math was memorized, not understood.

Why It Starts in the Primary Grades

- *Strong Foundations:* Early number sense and place value understandings predict math success through high school.
- *Math Identity:* By age 7, kids decide if they are “math people.” Joyful experiences now shape that identity for life.
- *Problem-Solving Habits:* Perseverance, flexibility, and creative thinking grow through practice, not sudden lessons in upper elementary school.
- *Prevention versus Catch-Up:* It is far easier to build strong math habits now than to “fill” gaps later.

Math for the 21st Century

Progressions does not just prepare kids for tests. It prepares them for the skills colleges and employers say matter most.

- *Critical Thinking:* Finding and analyzing solutions.
- *Creativity:* Using multiple strategies.
- *Collaboration:* Learning and problem-solving with peers.
- *Communication:* Explaining and defending answers.

These are the skills engineers, doctors, scientists, and innovators use every day.

Why Progressions Matters—Even for Strong Math Students

Depth vs. Surface

Children can often perform early math—counting, adding, reciting facts—without truly grasping the concepts beneath them. Research shows that procedural success without conceptual depth leads to fragile knowledge later. Both elite colleges and trade schools want students who can flexibly model, reason, and adapt—not just memorize. Progressions emphasizes that depth.

Transfer & Flexibility

Knowing $6 + 7 = 13$ is useful. Seeing it as $6 + 4 + 3 = 13$ or as 'one more than double 6' is powerful. That flexibility supports algebraic thinking and higher-order reasoning. Even strong students benefit from broadening strategies.

Early Habits of Mind

The early grades are where children practice explaining reasoning, listening to peers, testing solutions, and collaborating. These skills are rarely taught directly later, yet they're the very ones universities and STEM careers demand.

Preventing Ceiling Effects

High-achieving children sometimes plateau when early instruction only rewards speed and accuracy. Deep, progression-based learning challenges them to push further—developing perseverance, creativity, and problem-solving. This prevents the 'math wall' many students hit in middle school or at the college level.

Future Readiness

Nearly half of STEM majors drop out of their field because of shaky mathematical foundations, even when they excelled early. Progressions ensures that strong students don't just keep up, they grow into the kind of thinkers who excel when math gets complex. With its focus on problem-solving, communication, and collaboration, Progressions builds the skills universities prize.

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