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How to End the Math Wars

We have a new formula for teaching kids. Don't let ideology ruin it this time

AMERICAN EDUCATION IS EVERY BIT AS POLARIZED, RED AND blue, as American politics. On the crimson, conservative end of the spectrum are those who adhere to the back-to-basics credo: Kids, practice those spelling words and times tables, sit still and listen to the teacher; school isn't meant to be fun—hard work builds character. On the opposite, indigo extreme are the currently unfashionable “progressives,” who believe that learning should be like breathing—natural and relaxed, that school should take its cues from a child's interests. As in politics, good sense lies toward the center, but the pendulum keeps sweeping sharply from right to left and back again. And the kids end up whiplashed.

Since the Reading Wars of the '90s, the U.S. has largely gone red. Remember the Reading Wars? In the '80s, educators embraced “whole language” as the key to teaching kids to love reading. Instead of using “See Dick and Jane run” primers, grade-school teachers taught reading with authentic kid lit: storybooks by respected authors, like Eric Carle (*Polar Bear, Polar Bear*). They encouraged 5- and 6-year-olds to write with “inventive spelling.” It was fun. Teachers felt creative. The founders of whole language never intended it to displace the teaching of phonics or proper spelling, but that's what happened in many places. The result was a generation of kids who couldn't spell, including a high percentage who had to be turned over to special-ed instructors to learn how to read. That eventually ushered in the current joyless back-to-phonics movement, with its endless hours of reading-skill drills. Welcome back, Dick and Jane.

Now we're into the Math Wars. With American kids foundering on state math exams and getting clobbered on international tests by their peers in Singapore and Belgium, parents and policymakers have been searching for a culprit. They've found it in the math equivalent of whole language—so-called fuzzy math, an object of parental contempt from coast to coast. Fuzzy math, properly called reform math, is the bastard child of teaching standards introduced by the National Council of Teachers of Mathematics (N.C.T.M) in 1989. Like whole language, it was a sensible approach that got distorted into a parody of itself. The reform standards, for instance, called for teaching the uses of a calculator and estimation, but

some educators took that as a license to stop drilling the multiplication tables, skip past long division and give lots of partial credit for wrong answers. “Some of the textbooks and materials were absolutely hideous,” says R. James Milgram, a professor of mathematics at Stanford.

Adding to the math morass was the fact that 49 states (all but Iowa) devised their own math standards, with up to 100 different goals for each grade level. Textbook publishers responded with textbooks that tried to incorporate every goal of every state. “There are some 700-page third-grade math books out there,” says N.C.T.M.'s current president Francis (Skip) Fennell, professor of education at Maryland's McDaniel College.

Now the N.C.T.M. itself has come riding to the rescue. In a notably slim document,

it has identified just three essential goals, or “focal points,” for each grade from pre-K to eighth, none of them fuzzy, all of them building blocks for higher math. In fourth grade, for instance, the group recommends focusing on the quick recall of multiplication facts, a deep understanding of

decimals and the ability to measure and compute the area of rectangles, circles and other shapes. “Our objective,” says Fennell, “is to get conversations going at the state level about what really is important.” In recent weeks, that's begun to happen. Florida and Utah and half a dozen other states are talking about revising their math standards to match the pared-down approach. That pleases academic mathematicians like Milgram, who notes that this kind of instruction is what works in math-proficient nations like Singapore.

So do we have a solution to the national math problem? We certainly have the correct formula. The question is, Can we apply it? Already the N.C.T.M.'s focal points are being called a back-to-basics movement, another swing of the ideological pendulum rather than a fresh look at what it would take to get more kids to calculus by 12th grade. If the script follows that of the Reading Wars, what comes next will be dreary times-tables recitals in unison, dull new books that fail to inspire understanding, and drill, drill, drill, much like the unhappy scenes in many of today's “Reading First” classrooms. And that would be just another kind of math fiasco—of the red variety. Kids will learn their times tables for sure, but they'll also learn to hate math. ■



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