

High-Quality Research Rarely Informs Classroom Practice. Why?

How to bring education research, policy, and practice into alignment

By Thomas S. Dee — September 08, 2025  8 min read



— Isilena Mit for Education Week

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Recent federal actions have sown extraordinary chaos across multiple sectors of U.S. society. Education is certainly no exception. This year has seen simultaneous efforts to abolish the federal Department of Education, restrict inclusive school practices, and cut funding for schools, data, and research, adding to lingering pandemic-recovery challenges.

Yet, despite these dramatic disruptions and uncertainties, our highly decentralized system of public schools retains an extraordinary and unappreciated capacity to expand and enhance potent learning opportunities that support the academic potential of our children.

To realize this potential, we must first confront an important but uncomfortable truth. The robust links that should connect education research, policy, and practice are too often broken or simply nonexistent. The implications of this systems-level failure are apparent: Key indicators of student learning have been in decline—particularly among our most vulnerable students—for over a decade.

Though the United States has a world-class research capacity, it has produced frustratingly few reliable insights into effective school and classroom practices that can meet this challenge. Case in point, data from the federal Institute of Education Sciences, which has led high-profile investments in rigorous, practice-relevant research but is currently beleaguered by staffing and funding cuts, illustrate the lingering shortcomings of the research produced by our universities and research organizations.

Over the last 20 years, IES has commissioned 30 detailed “Practice Guides” that collectively provide 153 expert recommendations on a diverse set of issues in educational practice. IES also rates each of these recommendations using the four evidence tiers codified under the federal Every Student Succeeds Act. Disturbingly, most of the recommendations in these guides—nearly two-thirds—are based only on evidence from ESSA’s two lowest tiers that require nothing more than a “rationale” or correlational support.

When a firm and practice-relevant research consensus actually does exist, it frequently fails to influence education policy and practice. The ongoing contentiousness around how to teach reading provides a key illustration of this dysfunctional dynamic. In 2000, the National Reading Panel articulated an evidence-based consensus on reading instruction that, among other things, underscored the importance of promoting phonemic awareness and phonics among early readers as they learn to identify unfamiliar words.

However, an EdWeek Research Center survey conducted nearly 20 years later found that a large majority of K-2 teachers—75 percent—instead encourage early readers to identify unfamiliar words using various contextual clues.

“Science of reading” advocates may now feel that the tide is finally turning in the reading wars as more states declare their support for evidence-based reading instruction. However, these declarations will be little more than a fleeting, cosmetic victory if their reach does not extend from statehouses to classrooms.

A study that I co-authored on California’s Early Literacy Support Block Grant suggests state initiatives can, in fact, bridge this policy-practice gap when evidence-based guidelines and oversight are combined with flexibility and financial support at the school and classroom levels.

But improving reading instruction on an enduring, national scale will *also* require changing the curricula in many preservice teacher-training programs. Unfortunately, the academics who direct many of these teacher-training programs are siloed from (and hostile to) the evidence-based consensus on reading instruction.

An immediate path to expanding academic opportunities

Given the muddled state of education research, policy, and practice, what can ambitious education leaders do to better support teachers and to deliver for today's students? I recommend intentionally playing both the short and the long games.

The short game is to embrace opportunities for quick and meaningful wins. These are the common-sense education initiatives that share three critical features: evidentiary support, low financial costs, and scalability.

For example, district leaders, principals, and policymakers could expand early-college programs and Advanced Placement course offerings to give students more access to rich content. Such efforts can drive positive improvement at scale.

Consider, for example, AP's Computer Science Principles. Since the College Board introduced the course in the fall of 2016, the number of students taking an AP computer science exam, which includes both the original computer science course (first offered more than three decades ago) and the more recent principles course, has nearly quintupled. In a recent study, my co-author and I estimate that roughly two-thirds of this striking growth is singularly attributable to the introduction of the more recent principles course. It has attracted a more diverse group of students than the original without reducing engagement in the latter.

While staffing such courses comes with inherent challenges, AP's curricular standardization and the broad availability of aligned student and teacher supports make nationwide achievements like this unusually feasible.

Another compelling example of expanding academic opportunities for students involves the growing embrace of "automatic enrollment" policies that make a more advanced course (for example, algebra in the 8th grade) the default opt-out placement for high-achieving students rather than relying exclusively on recommendations by teachers, counselors, or parents. While we still have much to learn about the design and impact of these initiatives, they offer the heady promise of high impact and improved equity achieved with both low costs and rapid scalability.

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The lingering chronic-absenteeism crisis is a third path for do-it-now quick wins for students and districts. Several high-quality, field-based studies show that real-time attendance monitoring coupled with low-cost messaging to parents and caregivers can reduce chronic absenteeism by as much as 20 percent at a cost of under \$10 per student. Focused federal, state, and local investments in data systems and messaging platforms, such as this, provide an exceptionally cost-effective and scalable solution to a signature challenge of our fitful post-pandemic recovery.

Problem-focused research, better training needed for the long game

At the same time, identifying and embracing quick wins should not detract from the long game, which requires deeper, structural efforts to build the coherent system of research, policy, and practice our children deserve.

When hiring and promoting faculty, universities should prioritize credible research that solves real problems in the field and teacher training that reflects these insights. These faculty decisions are the most impactful, expensive, and lasting investments universities will make in practice-oriented teacher preparation.

Education professionals, whether in the classroom or a state office, also need better training and support to identify high-quality, practice-relevant research. Too many leaders making key decisions about programs, policies, and educational materials are unable to reliably identify rigorous evidence or even, as this guide suggests, distinguish research from anecdote and marketing materials.

Educators should also understand the limitations of research evidence. Rigorous impact evaluations such as randomized trials can only tell us what has worked someplace at some time—not what will work universally for educators facing specific challenges.

To address a specific challenge, district and school leaders should empower and support front-line educators in implementing continuous improvement. Under this approach, local improvement teams begin by understanding the problem they are trying to solve and identifying potential solutions.

They then implement and evaluate these solutions in focused and recurring Plan-Do-Study-Act cycles that conclude with a decision about whether to adopt, adapt, or abandon a particular solution. This allows schools and districts to confront specific and highly local problems with a healthy agnosticism about what might work and a firm resolve to iterate toward effective solutions.

The sobering reality is that continuous improvement efforts often fail in education (and elsewhere) because the leaders promoting change don't empower the front-line professionals needed for true success.

Conducting focused, effective continuous improvement also requires additional supports that are lamentably unavailable in most schools today. These include nimble supportive data systems and the time and training educators need to use those systems to characterize a problem, implement possible solutions, and evaluate the impact. State and district leaders can address these barriers by authorizing local improvement teams and providing relevant supports. However, they also need to nurture a firm institutional commitment to continuous improvement that can endure beyond the inevitable leadership turnover.

Real success in this long game resembles the tortoise: shifts in university and philanthropic investments toward rigorous research and aligned teacher training, steady and focused inquiry cycles that guide the local implementation of research into practice, and an enduring persistence among institutional actors to build and sustain a better, problem-focused system of research, policy, and practice. The good news is that, even in today's tumultuous context, education policymakers and key institutions retain a powerful capacity both to embrace quick wins and to "bet on the tortoise" through an insistent focus on improving the quality and connectivity of research, policy, and practice.