

---

# Stopping the pendulum: Making education a research-based profession

**Doug  
Carnine**



What real professions get right – and education doesn't.

Discredited ideas don't return to most professions.

In the distant past, surgeons did not wash their hands before performing surgery. Once sterile technique was settled science, it was incorporated into practice with no turning back. Surgeons have continued washing their hands ever since. Similarly, at one time, doctors treated ulcers by advising patients to reduce their stress. Once it was discovered that antibiotics cured ulcers, doctors never went back to suggesting stress was the cause.

Professions grounded in evidence don't revert to disproven practices. Education does. It lurches on a pendulum, swinging back and forth between approaches already tested and found wanting.

Nowhere is this clearer than in reading instruction. Phonics has been adopted, abandoned, rediscovered and abandoned again. In the 1980s, whole language shoved it aside. In the 1990s, phonics made a comeback, only to be marginalised again until *Sold a Story* and the 'Mississippi Miracle' brought it back to centre stage. As journalist Emily Hanford has said, "I don't like the analogy of the pendulum; it swings back and forth, with no sense of progress ... if the pendulum is phonics – I hope that never happens again."

This endless cycling is not progress. It is a symptom of a deeper, disquieting flaw: education has never become a research-based profession.

## The cost of standing still

The evidence is plain. At a [2025 Congressional hearing](#), Chair Kevin Kiley noted that reading and maths scores in the United States have essentially "flatlined" since 1971. Today, only 31% of fourth graders and 30% of eighth graders read at a proficient level. Said differently, nearly 7 in 10 are not proficient. These numbers are not mere statistics. They represent millions of children starting life with an academic handicap that often compounds into a lifetime of diminished opportunity.

Macke Raymond of Stanford's Center for Research on Education Outcomes captured the futility of four decades of reform when she titled a [recent retrospective essay](#) 'Times have changed. The school system? Not so much'. That frank assessment should force us to ask: why has wave after wave of reform produced so little durable change?

The answer is that education lacks the institutional safeguards other professions take for granted.

## Five pillars of a research-based profession

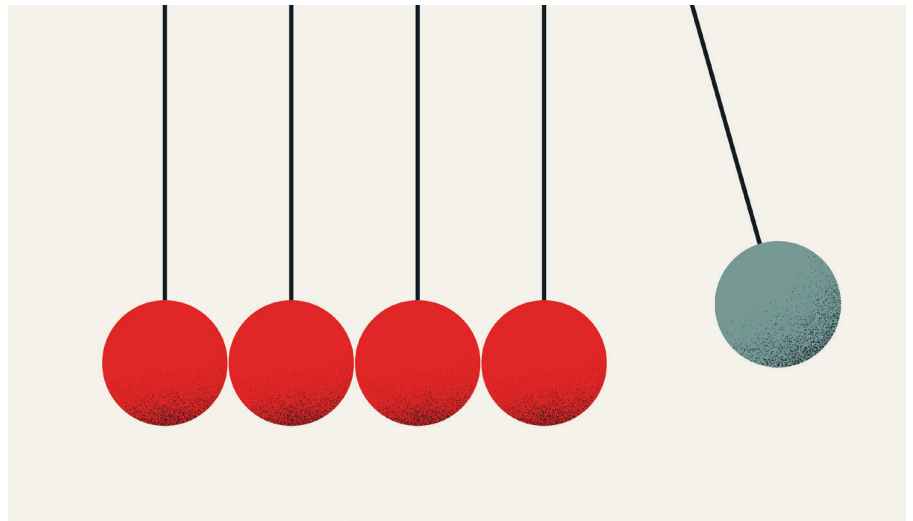
Professions that truly put evidence at their core – medicine, aviation, engineering, seamanship – are built on five common pillars. Education needs all five.

- 1 A shared knowledge base.** Effective practices exist in early reading and maths, but unlike medicine's consensus on germ theory, education does not consistently adopt or adhere to them. This leaves classrooms open to fad and opinion.
- 2 Research-aligned preparation.** Aspiring doctors learn evidence-based medicine during their residencies. By contrast, a recent review found only 28% of teacher-prep programs fully equip future teachers with the essentials of reading. Even worse, 91% earned 'C' or below for clinical practice. If the majority of medical residencies were so poor, we would call it malpractice.
- 3 Licensure rooted in competence.** Half of US states allow teachers to enter classrooms without passing a research-based exam in reading instruction. Imagine licensing surgeons who had never demonstrated skill in sterile practice.
- 4 Accreditation with teeth.** Today, 72% of teacher-prep programs that fail to prepare candidates effectively still receive accreditation. No other serious profession tolerates such laxity.
- 5 Accountability for quality of practice.** Teachers can lose their licences for misconduct but rarely for persistently poor instruction. In malpractice suits, the school – not the teacher – is held accountable. Compare that to medicine, where professional liability drives fidelity to evidence.

Until these pillars are in place, education will continue to swing with the pendulum.

Professions rarely reform themselves voluntarily. They change after a crisis of trust forces the issue. The *Titanic's* sinking spurred international standards for maritime safety. The Great Depression gave rise to the SEC. Medicine itself only embraced evidence systematically after public frustration with poor and inconsistent outcomes.

We are in education's own crisis of [trust](#). The flatlined scores, the persistent inequities, the exasperation of parents – all signal a system that no longer commands confidence.



The question is whether we will respond with seriousness equal to the challenge.

### Building guardrails for education

Other professions confronted with crisis responded by installing guardrails – the five pillars both limited professional discretion and empowered practitioners who wanted to do right by their clients. After the *Titanic*, sea captains lost some freedom of movement but gained a coherent system of safety standards that saved lives. Education needs to make the shift to become a research-based profession, the same shift that all genuine professions have had to make.

The shift for education requires:

- a **shared knowledge base** to ensure the profession has one canonical source of truth
- **implementation tools** that translate the shared knowledge base into daily practice
- a **consortium of states and districts** willing to adopt the five pillars, ensuring scale and coherence rather than isolated pockets of reform.

But this shift will succeed only through the combined pressure of insiders and outsiders.

The Evidence Advocacy Center has crafted a [plan](#) to bring about this shift. It describes not only the five pillars but also the role of two entities: an alliance and a collaborative, which are described below.

Inside the profession, an [alliance](#) of evidence-aligned organisations must codify, monitor and advocate for

research-based practice in the five pillars: preparation, licensure, accreditation, professional learning and job descriptions. This is the work of research-aligned teachers' colleges, subject-matter associations and professional groups.

But history shows insiders alone are not enough. External pressure has always been essential to reform. This requires a [collaborative](#) of parents, families, business leaders, social justice advocates, elected officials and community colleges. They provide the urgency, the public voice and the political leverage to demand lasting change.

The alliance ensures fidelity to evidence. The collaborative ensures the profession cannot drift back to fad and fashion. Together, they are the necessary architecture of a research-based education profession.

---

*This article originally appeared on Robert Pondiscio's blog, [The Next 30 Years: The Future of Education Reform](#).*

*Dr Doug Carmine, Professor Emeritus at the University of Oregon and President of the Choose Kindness Foundation, spent 20 years of his career focused on improving the achievement of K–12 students who too often fail in school: children of poverty, limited English speakers and students with disabilities.*