

## Touching Only a Part of the Education System: A Fatal Misunderstanding

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I have dedicated over 50 years to the field of educational reform. Throughout my career, I served as a faculty member, researcher, and director of numerous large-scale federal projects. Most notably, from 1978 to 1991, I directed the [Direct Instruction Follow Through Model](#), which aimed to improve achievement outcomes for students facing multiple risk factors. From 1991 to 2005, deeply disturbed by the mistreatment of the Follow Through findings, I shifted my career focus to lead the National Center to Improve the Tools of Educators<sup>1</sup>, advocating for the integration of evidence into the decision-making processes of educators. Like many others in this challenging arena, I faced my share of failures, carrying the bruises and scars from lessons learned the hard way. I have documented these experiences in over a [dozen papers](#). The first paper, published in 2000, *Why Education Experts Resist Effective Practices* described an aspiration, named in the subtitle: *And What It Would Take to Make Education More Like Medicine*. In this paper, a quarter of a century later, I move from an aspiration to a proposed plan of action to make education more like medicine and every other evidence-based profession. The proposed plan centers the necessity of a "systems perspective" to address the chronic underachievement of U. S. students.

### Changing the System

Educational reform efforts consist of worthy efforts in a number of areas, for example, early literacy, math, school governance, career technical education, product development, research, and more. While having a highly specific target for reform is understandable, it overlooks a fundamental truth: the urgent need to also help support a comprehensive transformation of the entire education system. W. Edward Deming, widely considered to be a master of continual quality improvement, wrote: "Eighty-five percent of the reasons for failure are deficiencies in the systems and process rather than the employee. The role of management is to change the process rather than badgering individuals to do better."<sup>2</sup>

Individual targets for reform efforts have failed to change the system, with educators being "badgered" to improve student achievement in an often untenable situation. Simultaneously working on individual targets of reform without regard for the overall education system approach has arguably failed to lead to sustained improvement, not because the specific targets for reform areas aren't important, but because the education system at its roots itself has impeded long term success.

### A Comprehensive Solution

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<sup>1</sup> From 1991-2005 Dr Carnine, working in large cities like Los Angeles and Dallas, six states, and at the federal level, was always involved in coalition building, and strategic planning around policy and implementation on the ground. He helped legislative, state board, business, community, union, and publisher groups to understand and support evidence-based educational tools for students with multiple risk factors. Under the guidance of the then Secretary of Education and an assistant to President Bush, he also consulted with five offices within US Department of Education as well as with NSF and USAID on moving research into policy and practice. With his presidential appointment to the National Institute for Literacy, as chair of the program committee, Dr. Carnine oversaw the distribution of the National Reading Panel Report during President Clinton's administration. Finally, he served on the National Educational Research Policy and Priorities Board for the Office of Education Research and Improvement. For a more complete historical account see [Historical Antecedent of the Evidence Advocacy Center: The National Center to Improve the Tools of Educators](#).

<sup>2</sup> Deming, W. E. (2000). *Out of the crisis*. MIT Press

To move beyond essential yet limited isolated targets for reform requires a [truly comprehensive solution](#) that integrates all of what I consider to be the following five pillars of a research-based profession:

- A professional knowledge base anchored to reliable research evidence that all educators share, and education publishers follow in producing their products
- Research-aligned educator preparation and ongoing professional learning
- Educator licensure rooted in demonstrated competence
- Accreditation of educator preparation programs based on evidence
- Accountability for the quality of educators' practice

Only by understanding the need for the concurrent implementation of these five pillars of a research-based profession can the education reform advocates gain a clearer understanding of the bigger picture and make informed decisions that reflect the intricate realities of the education system and how to genuinely transform it. To create significant and enduring improvement in education, it is imperative to go beyond an aggregation of siloed targets for reform; instead, it is important for states, the federal government, and philanthropic organizations to support cohesive, systemic change built on the understanding of the interconnectedness of all educational components.

### **The Parable of Touching only a Part of the Education Elephant**

The parable of the *Blind Men Touching the Elephant* captures the consequence of ignoring the need for systemic change. Each group of advocates for a particular target for reform, convinced of its own unique insights when touching only their part of the “Educational Elephant,” unsurprisingly report findings based on only its specific area of reform. For example:

- The **Early Literacy Advocates** proclaimed, “Education is like a strong foundation! Without early reading skills, students struggle to build their knowledge.”
- The **Math Advocates** countered, “No, education is like a complex puzzle! If students don't master math, they won't be able to solve real-world problems.”
- The **School Governance Advocates** insisted, “You are all mistaken! Education is about effective leadership and policies that ensure schools function properly.”
- The **Career Technical Education Advocates** concluded, “You are all incorrect! Education must prepare students for careers and equip them with skills and habits for the workforce.”

As the advocates debated passionately, each was convinced that its perspective would lead to important and lasting changes. Unfortunately, they seemed unaware of how education was operating as a [minimally functional education system](#), which itself had undermined their efforts in the past and would continue to do so in the future. Their well-intentioned and dedicated work, however, was akin to meticulously repairing individual parts of a crumbling building without addressing its fundamental and systemic structural flaws.

### **The Lesson of the Whole Education System**

In deference to the parable of the Blind Men Touching the Elephant, as one of many who have worked for educational reform for decades, I would humbly assert: “My friends, you have focused solely on parts of the education system, but none of you have considered the whole picture. Your conclusions, limited to your focus areas, fail to recognize how the reality of the entire system precludes the enduring success of your individual efforts.”

## The Moral: Beyond Siloed Targets for Reform

The parable illuminates a critical truth: advocates fail to recognize that the current education system in its fractured state, inherently undermines their efforts to meet their goals of sustained improvement.

On approach to Reagan National Airport, while finalizing a speech on the importance of evidence-based practices in education, I had just finished writing, “In a complex system, such as an airplane, if one part fails—like the flaps—the entire plane can go down.” At that moment, the captain’s voice interrupted with an announcement, accompanied by the wail of a siren: “It seems our flaps may not be working, so we’re being diverted to Baltimore International Airport.” This real-life scenario illustrates the need for trustworthy systems in which each component has been rigorously tested to ensure that the entire system of components work seamlessly and successfully.

In education, the system components have not been tested to demonstrate that they work seamlessly and successfully, which allows, for example:

- The graduates of effective educator preparation programs to go into a school that not only fails to implement evidence-based approaches, but forbid the use of them because the district favors program such as Reading Recovery and Lucy Calkins’ Units of Study
- Educator preparation programs to refuse to reform because they have been accredited by organizations that do not include reliable evidence in their review and approval process
- Professional learning to be based on educational fads, that deprive educators of the opportunity to develop the skills and knowledge needed for them to adequately prepare their students for later, educational opportunities, and ultimately a viable career and lifestyles.
- Educational products for instruction, assessment, etc. to be based on educator preference rather than being based on the shared knowledge base of the profession

Ironically, it is through this fundamental, systemic transformation in which the components are demonstrated to be effective that the advocates can find enduring success for their targets of reform. It is, therefore, in the students’ best interest to support the development of an education profession grounded in findings from:

- reliable scientific research
- states, districts, and schools that have demonstrated consistent higher-than-expected levels of student achievement.

To address the need for a comprehensive educational reform effort, the [Evidence Advocacy Center](#) is making a [concerted effort](#) to champion this vital transformation by providing the resources and guidance to support the development of the five pillars:

- A shared knowledge repository consisting of both [vetted research-based resource menus](#) linked to evidence-aligned organizations and comprehensive canons that include linking literacy science and math science to learning science and instructional science.

- An easy-to-use [policy navigator tool](#) that provides language for the creation of evidence-aligned policies, to be used by state departments of education and policymakers, educator preparation programs, and districts and schools
- Step-by-step [implementation guides](#) to facilitate the use of evidence

By elevating education to a research-based profession with systematic implementation, educators will be equipped with the rigorous preparation, continuous professional development, and robust support they need to drive significant increases in student achievement and enhance every students' prospects for a fulfilling life. Together, by embracing cooperation and committing to systemic change, all organizations can finally create an education system that truly benefits all students, empowers all educators, and strengthens society as a whole. The time for action is now.

