Closing the achievement gaps between advantaged and disadvantaged students constitutes the biggest challenge facing today’s schools. We all know the statistics on test scores and dropout rates. But a sadder commentary may be the resulting collateral damage that has dragged down good instruction, de-skilled many teachers, squeezed subjects other than math and reading out of the curriculum, and produced data juggling and test falsification by desperate administrators trying to avoid having their schools branded as “failing.”

How did this mess happen? Why hasn’t the estimated $3 trillion spent on school reform since the 1960s made a difference? We’ve tried just about everything: smaller schools, year-round schools, single-sex classes, after-school mentoring, school uniforms, charter and magnet schools, school-business partnerships, merit pay for teachers, payments to students for performance, private management companies and for-profit schools, takeovers by mayors and state departments of education, site-based management, data-based decision making, and just about every idea containing the words “standards” and “accountability.” All of these suggested silver bullets promised results, but little has changed. Most are built on structural changes and calculated to have an impact on entire school districts or states. But these structural changes have focused too much on low-level, highly prescriptive pedagogy intended to improve standardized-test scores.

The mainstream school diet for many poor and struggling learners is dominated by a remedial pedagogy that has failed to lessen achievement gaps. I believe it has actually contributed to their perpetuation. The instruction these children receive is often designed to determine what they can’t do, don’t like to do, and see no reason for doing. Then their teachers are told to focus on beating them to death with it.

Evidence of this failed pedagogy is apparent in one national report after another, and yet we continue to search for quick-fix structural solutions rather than alternative methods. The solutions, by whatever new names we give them, are always reiterations of the same pedagogy—the same drill-and-practice model for learning. And our universal criterion for accountability remains the same, with new names given to the same old achievement tests of decades past.

The singular reliance on tests for accountability forces the pedagogy of prescription and hamstrings good instructors in the process. Is it any wonder that some excellent teachers leave the profession, or flee urban schools where prescription is almost universally practiced?

Isn’t it time to explore a counter, perhaps even counterintuitive, approach based on pedagogy radically different from what Pavlov used to train his dogs? Accountability for truly educated minds in today’s knowledge-driven economy should consider high-end learning skills—those that include the ability to do the following:
• Plan a task and consider alternatives;
• Monitor understanding and the need for additional information;
• Identify patterns, relationships, and discrepancies;
• Generate reasonable arguments, explanations, hypotheses, and ideas;
• Draw comparisons to other problems;
• Formulate meaningful questions;
• Transform factual information into usable knowledge;
• Rapidly and efficiently access information;
• Extend one’s thinking;
• Detect bias, make comparisons, draw conclusions, and predict outcomes;
• Apply knowledge and problem-solving strategies to real-world problems;
• Work and communicate effectively with others;
• Derive enjoyment from active engagement in learning; and
• Creatively solve problems and produce new ideas.

These learner-centered skills help develop young minds and promote genuine student engagement, thus increasing achievement. Focusing on these kinds of outcomes may be counterintuitive to the “more practice is better” pedagogy, but our track record with compensatory learning models should help us realize that we need more-creative approaches. We also need an infusion of motivationally rich experiences into the curriculum that will promote engagement, increase enjoyment, and produce a genuine enthusiasm for learning. We need an infusion of motivationally rich experiences into the curriculum that will promote engagement, increase enjoyment, and produce a general enthusiasm for learning.

Common sense and our own experience tell us that everyone does a better job when working on something that is personally engaging. Extracurricular activities are based, for example, on instruction that is the opposite of drill and practice. How many unengaged students have you seen on the school newspaper staff or the debate team? In the chess club or the concert choir? Engagement occurs when students have choices in what they participate in and how, when they can interact in a goal-oriented environment with like-minded students, and when they are able to use authentic problem-solving, interpersonal skills, and creative learning strategies. Engagement comes when they have the opportunity to produce a product, service, or performance, or to develop work for intended audiences. The enthusiasm and interest that result from such experiences exemplify a learning environment that differs completely from prescriptive pedagogy.

All learning, from diapers to doctorate, exists on a continuum that spans the deductive, didactic, and prescriptive on the one hand, and the inductive, investigative, and inquiry-based on the other. Students with lower achievement are subjected to endless didactic activities, and when their scores don’t improve, they receive double the drill-and-kill work. This has turned many schools into joyless places that generate mind-numbing boredom, a lack of genuine student and teacher engagement, absenteeism, and increased dropout rates. Proponents of popular but highly prescriptive programs may boast of test-score increases, but does the endless practice simply prepare students for more test-taking or help them learn to enjoy the act of learning?
Student engagement has been defined in many ways, but I view it as the infectious enthusiasm students display when working on something of personal interest pursued inductively. This and other highly engaging approaches motivate students to improve basic skills and complete higher-level work. True engagement comes from learning activities that challenge young people to stretch above their current comfort level. Such activities are based on resources and methods of inquiry that are qualitatively different from repetitive practice. The guiding principle in this kind of learning can be stated simply: No Child Left Bored.

Research in this area is clear and unequivocal: High engagement results in higher achievement, improved self-concept and self-efficacy, and more-favorable attitudes toward school and learning.

It will not be easy to turn around an education establishment that has made massive financial and policy investments in one particular brand of learning. Nor will it be easy to circumvent the powerful influence of the textbook- and test-publishing industries that thrive on prescriptive curricula and test-driven approaches to accountability.

But change is possible if we take advantage of the remarkable advances in information technologies that have given teachers the equivalent of a dozen teaching assistants in their classrooms. These technologies make it possible to quickly and easily assess students’ interests, learning styles, and preferred modes of expression. What formerly took teachers weeks or even months to learn about students’ strengths can now be determined electronically. Powerful search engines can then match engaging learning resources to individualized student profiles.

When technology does some of the hard work, true differentiation can occur. Yet while every other field of study has made imaginative uses of technology, educators have too often settled simply for electronic worksheets and encyclopedias online.

We need the courage to explore bolder, more innovative alternatives, so that we can provide all students with highly engaging experiences—the kind of instruction available in the nation’s best public and private schools. A more engaging pedagogy, combined with greater and more innovative uses of technology, can deliver the resources to make these alternatives possible.

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