Education: Bringing Innovation To Scale

Kevin Huffman

In April, McKinsey & Co. released a study on the lamentable state of American education. Despite an endorsement from Secretary of Education Arne Duncan, the report received only modest coverage, perhaps because people already have internalized the general idea that our public education system is operating at less than top speed, to put it mildly. But the report is worth a second look for two reasons. First, it monetizes the costs of the "achievement gap"—the spread in educational outcomes between different groups of students. The results were stunning. The international gap, between U.S. student performance and the academic achievement of the top performing education systems in the world (like Singapore and Finland), costs the country between $1.3 and $2.3 trillion annually, while the domestic gap, between low-income kids and their higher-income peers, costs the country between $400 billion and $670 billion each year.

The report also looked at test scores from the National Assessment of Educational Progress (the national test sometimes referred to as "the nation's report card") and laid bare some of the appalling gaps between students in different states and districts. To pick a particularly grim example, in 2007 middle- and upper-class white fourth graders in New Jersey scored five years ahead of low-income black children in Washington, D.C. Put another way, by the time they had received five years of formal schooling, low-income kids in Washington had fallen five years behind the standards we would want all American kids to attain.

The McKinsey report is only the latest in a string of dismal findings. So why are so many people in the education field today feeling so optimistic about the future? The answer is innovation. A wealth of objective evidence gathered from individual classrooms, schools, and even districts and states show that better results are being delivered to many low-income kids thanks to successful local innovations. Indeed, in many high-poverty schools, we increasingly see differentiated results for similarly situated kids. While the average American public school experience looks largely the same as it did 50 years ago, individual teachers and schools trying innovative programs and measuring outcomes abound.

Some of this is borne out in McKinsey's study. African American and Latino students in Texas, for example, scored two grade levels higher than African-American and Latino students in California, and low-income students in New

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York City scored two grade levels higher than low-income kids in Washington, D.C. These results come on the heels of significant efforts in Texas and New York City to increase non-traditional teachers in classrooms, measure student results more aggressively, increase public school options for kids, and generally veer from more traditional educational delivery. Such results explode the myth that demographics is destiny. It is doubtlessly true that the conditions of poverty (lack of access to high-quality pre-school, poor nutrition and health care, deplorable housing conditions) are both a predictor and cause of poor academic achievement. But it's increasingly clear that there are best practices in the field—many developed through a boon in innovation—and that our task now is to identify and expand the practices that work to a statewide or nationwide level.

There has never been a more innovative time in modern American education, particularly in high-poverty school districts. In Washington, D.C. the public charter school KIPP DC: KEY Academy, founded by Teach for America alum Susan Schaeffler, requires students to be in class for an extended day (7:30 am to 5 pm), week (two Saturdays a month), and year (mandatory summer school). Through inspired teaching, a focus preparing children for college, and constant access to teachers who carry cell phones so that they can be reached with homework questions at any time, KIPP students make impressive gains in learning, despite coming from the same high-need communities as those students in Washington's dismal public school system. KEY Academy students enter as fifth graders scoring at the 24th percentile in reading and the 26th percentile in math but jump to the 65th percentile in reading and the 91st percentile in math by the end of eighth grade.

Or take Donna, Texas, home of IDEA Public Schools. Founded as a tiny after-school program by Teach for America alums Tom Torkelson and Joanne Gonzalez, IDEA is now a self-governed cluster of 10 public charter schools, serving kids in the Rio Grande Valley in two of the poorest counties in America. The only school in the region to offer the rigorous InterBaccalaureate program, which is mandatory for all kids in the school, IDEA College Prep graduated its first high school senior class in 2007. To date, 100 percent of its graduates are enrolled in college—in a region in which only 13 percent of adults have college degrees. IDEA focuses relentlessly from elementary school forward on college graduation, and by the time a student graduates from high school, he or she will have visited more than 25 four-year colleges. Last year, IDEA was named the 19th best high school in America by *U.S. News & World Report*—a meteoric rise for a school that didn't exist a decade ago.

These schools, and many others across the country, show that well-conceived and well-executed innovations can help students in the poorest parts of the country achieve at a high level on an absolute scale. The schools were invented by motivated young entrepreneurs and facilitated by local laws and regulations allowing the creation of new schools. True innovation in education now requires proving that successful models can be brought to scale to serve tens, even hundreds of thousands of students. But this kind of scale and impact can come only at a cost to the status quo; true innovation requires not only expanding programs that are proven to work, but decreasing or eliminating those things that do not work. And therein lies the rub.

President Obama and Duncan inherited a mess of an economy, including the impending financial meltdown of many state and school districts. Part of their stimulus package wisely included more than $100 billion for education, constructed around an enormous platform for change. First, in order to get the general "stabilization funding" designed to reinforce dwindling state coffers, states had to commit to improve current systems around data quality and enhance efforts to ensure that children of all income levels have access to high quality teachers. Perhaps even more significantly, the stimulus included $4.35 billion to build a "Race to the Top Fund," giving grants to those states making the most progress in key reforms, and $650 million to build an Innovation Fund to "grow what works," including proven nonprofit and district projects. This dramatically increases the discretionary funding available to Secretary Duncan and creates an enormous opportunity for the new administration to influence state policy decisions.

Our task now is to bring the best education innovations to scale, on a statewide or even a nationwide level.

But in the next phase of innovation, we must think bigger. Real innovation in public education must focus on the dramatic expansion of things that have demonstrated impact on kids, infusing them with the kind of public funding that has poured down the same grooved paths for decades regardless of results. Setting politics aside, there are a few fundamental policy principles that should guide any effort to expand successful innovative initiatives to the district, state, or even federal level.

EVALUATING TEACHER TRAINING WITH DATA

Some training programs (both traditional colleges of education and alternative paths to teacher certification) produce teachers with significantly better records than other programs. Successful programs should get additional public

resources to grow, and principals and superintendents should be able to access the historical results of each program so that they can make better-informed hiring decisions. This requires first having data that tie student performance (measured in gains rather than absolute scores) back to each individual teacher and to the university or program that trained the teacher. Remarkably, most districts and states currently lack this capacity and, therefore, we continue to give public funds to underperforming institutions without regard to the quality of the instructors they produce.

To give a sense of how important this question is to the future of our country, consider the work of economist Eric Hanushek, as reported by Malcolm Gladwell in *The New Yorker*. According to Hanushek, if we replaced the bottom 6 to 10 percent of teachers in the country with teachers of average quality (or turned the bottom 10 percent into average-quality teachers through better training and professional development), the resulting improved student performance would eliminate the gap between the United States and many of the best countries in the world.

There is considerable angst about the use of standardized-test data to measure the effectiveness of individual teachers. Much of this angst stems from legitimate worries about the impact of small sample sizes and the prospect of random uncontrollable factors driving class-level results. However, at a larger scale, test results provide critical objective insight into which groups of teachers—and which training and professional development programs—are having the greatest impact on student learning.

GROWING THE NUMBER OF EFFECTIVE SCHOOLS—AND SHRINKING THE NUMBER OF LOW PERFORMERS

Schools that produce remarkable results should be replicated using public resources. Currently, charter schools are either banned or have their numbers capped in 36 states, meaning we can't replicate the most successful ones. At the same time, traditional schools that get extraordinary results are often given credit for having ingenious individual leaders, but not internal systems that other schools can emulate, Duncan is using the federal bully pulpit to shake loose anti-competitive state laws, telling states that cap their charter school numbers that they will be at a serious disadvantage in competing for the $5 billion in the Race to the Top Fund. And Obama's championship of charters has started to peel off some Democratic converts; for example, Boston Mayor Tom Menino recently reversed his longstanding opposition and is working to eliminate a state cap on charter schools that has prevented some of the most successful schools in the country from opening campuses in Boston.

Nevertheless, we must transcend an ongoing systemic and public aversion

to reconstituting schools and programs that don't work (this rule must apply, by the way, to the charter-school movement itself, which has been far too slow to shut down underperformers). At Locke High School in Los Angeles, the school enrolled more than 1,400 freshmen in 2004; four years later, 261 seniors graduated, and only 85 of them had completed the classes required to attend a California state university. Despite this sorry track record, entrepreneur Steve Barr and his Green Dot charter network had to stage what amounted to a hostile takeover to gain control of and reconstruct the high school. And when Washington, D.C. schools Chancellor Michelle Rhee took over the worst-performing school district in America and announced that she was shutting down 23 of its under-performing, under-capacity schools, activists organized high-profile rallies against the seemingly obvious decision.

The Obama Administration is putting political capital on the line by seeking to reconstruct the 5,000 lowest-performing schools in the country over the next five years. As Duncan noted in a July speech to the NEA, just 2,000 high schools produce around half of the country's dropouts. This creates a huge opportunity to replicate success: 5,000 schools could be an unprecedented opening to scale innovative endeavors that work.

CREATING EFFECTIVE DATA SYSTEMS

To identify the things that work and stop doing the things that don't, we must collect massive amounts of data, study them in the right way, and resist efforts to restrict their use. According to the Data Quality Campaign, a nonprofit focused on helping state policymakers improve the availability and use of data for education policy decisions, while 48 states use student identifier numbers to track student progress over time, only 21 have data that match teachers to students. No Child Left Behind's reputed emphasis on testing and data left most laypeople convinced that there are classroom-level data on most students in the country. Yet in fact it is very difficult in most school districts to study student results to determine which inputs are predictors of success. Even states that create data systems find politics intruding on the use of the system; in New York, for instance, state law prohibits the use of the state's value-added data system in teacher tenure decisions.

At a more micro level, we can improve individual teacher performance by figuring out which teacher actions are most linked to student growth and ensuring that professional development focuses on improving those teacher actions. Without student achievement measurements linked to teachers, we lack the objective results to effectively regress data, and we cannot design professional development to reinforce teacher behaviors proven to advance student achievement. This harms everyone. School officials complain when teachers don't

improve, and teachers complain about the truly mediocre (and expensive) professional development foisted on them through tedious seminars and classes.

TYING PUBLIC FUNDING TO PERFORMANCE

Too often, top programs are dependent on philanthropy to grow while public dollars go to failing programs. This is problematic for several reasons. First, nonprofits in America simply do not grow. According to nonprofit consulting firm Bridgespan, since 1970, more than 200,000 nonprofits have been founded, but just 144 of them have reached $50 million or more in annual revenue (Teach for America, where I have worked for the past decade and which climbed this mountain, is the one-in-a-thousand exception).

This challenge of accessing significant capital markets has enormous consequences in thinking about innovation in education. When nonprofits create small programs that work, they generally expand incrementally by seeking additional grants and attempting to gradually reach more students. The reality, though, is that significantly growing innovations in public systems requires public resources. And in a world of scarce public resources, the logical way to fund the scaling of small innovations is to redirect funding from programs that are not effective.

Through the new $650 million "Innovation Fund," the government can direct money to expand endeavors with a proven track record of success, whether the programs are driven by states, districts, universities or non-profits. But to truly make a difference, $650 million will have to be a mere down-payment on a reordering of spending priorities, away from ineffective programs and toward initiatives that demonstrate the capacity to improve student outcomes. The bottom line is that nobody should get federal education funding without demonstrating that the expenditures are directed to things that have been proven to work.

Innovation on a small scale has built critical models of success in education. Ultimately, though, the most dramatic innovation of all may simply be gathering data and evidence, rethinking our public funding decisions so that we start with a blank slate rather than the same ineffective baseline, and ensuring that the most effective practices and programs can expand dramatically.

As the president and education secretary have made clear, maintaining the status quo is not a real option. The stakes are too high for the country to continue propping up a mediocre public education system. In a universe in which apples-to-apples evidence shows that some classrooms, some schools, and some systems are moving faster than others thanks to innovations, there is no reason to continue doing what doesn't work. Using data to inform our funding and policy decisions, we can build stronger teacher training and professional development

for the three million hard-working teachers who want the best for kids, we can create schools that improve the life chances of high-need students, and we can do this at a much larger scale. The confluence of real evidence of positive results and an administration that is willing to take risks and push the envelope has created an enormous window of opportunity, and we must take advantage. D

Strategy: A National Innovation Foundation

Howard Wial

To President Barack Obama's auto industry task force, as well as to most commentators on the industry, the main problems that General Motors and Chrysler faced this year were problems of cost. If the companies could shed mountains of debt, lower their labor and retirement costs, and cut dealers and brands, the standard story went, then they could once again become competitive. Summarizing his conditions for assisting GM and Chrysler, Obama said, "Now, what we're asking for is difficult. It will require hard choices by companies. It will require unions and workers who have already made extraordinarily painful concessions to do more. It'll require creditors to recognize that they can't hold out for the prospect of endless government bailouts . . . it will require efforts from a whole host of other stakeholders, including dealers and suppliers."

But the biggest obstacle to the prosperity of the Detroit-based automakers is not high costs but insufficient innovation. For too long, U.S. automakers failed to adopt world-class production methods that would bring quality up to the standards of their best foreign competitors. They introduced hybrids and other alternative-powered cars too late. And they did not cultivate the innovative capacities of their suppliers that make most of the components of their cars. The results have devastated not only the American auto industry, but also the Great Lakes regions that depend on it.

Federal policymakers' failure to see the domestic automakers' innovation problem cannot be blamed on the shortsightedness of individuals, nor was it unique to the auto industry. Instead, the problem was structural: Almost uniquely among economically advanced nations, the United States has no government agency or program responsible for innovation as a whole, either for a particular industry or for the entire U.S. economy. Innovation is the key to economic growth and rising standards of living. Yet there is perhaps no other issue of comparable national importance on which federal policy is so lacking. It is high time for the

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