



Movin' *It and* Improvin' It!

Using Both Education Strategies
to Increase Teaching Effectiveness

Craig D. Jerald January 2012

Center for American Progress



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Introduction and summary

Fueled in part by the U.S. Department of Education’s Race to the Top program, a massive effort to overhaul teacher evaluation is underway in states and districts across the country. The aim is to ensure that evaluations provide a better indication of “teaching effectiveness,” or the extent to which teachers can and do contribute to students’ learning, and then to act on that information to enhance teaching and learning.

In October the National Council on Teacher Quality reported that nearly two-thirds of the states made changes to teacher-evaluation policies over the past three years, a stunning amount of policy activity in an area that had remained nearly stagnant for decades. Today 25 states require an annual evaluation of teachers—up from 15 two years ago—and 23 states now require evaluations to at least consider “objective evidence of student learning in the form of student growth and/or value-added test data.”¹

So far most of the public debate about such reforms focused on the technical reliability of the techniques being used to measure effectiveness, especially value-added estimates of teachers’ impact on student learning. Value-added measures rely on statistical models that examine the difference between the actual and predicted achievement of a teacher’s students given their prior test scores, demographic characteristics, and other measures in the model.

But as states and districts actually begin to adopt policies to measure teaching effectiveness, another kind of debate is now raging: How exactly should school systems use the results of their new teacher-evaluation systems? More broadly, once states and districts begin to measure effectiveness, what kinds of strategies should they adopt to *increase* the amount of measured effectiveness in the teacher workforce over time?²

In November the Education Writers Association held a seminar on teacher-evaluation reforms for nearly 50 education journalists. The following day Julie Mack of the *Kalamazoo Gazette* blogged about the top “take-away messages” from the event, which featured leading reformers as well as officials from teachers unions. “A point

stressed repeatedly,” wrote Mack, was that “the real point of this reform is not punitive, i.e., firing bad teachers.” Instead, she had heard, “It’s about providing teachers with better feedback, as well as the tools and support systems to help them improve.”³

If so, that point seems to have been lost on state legislators. Among 17 states that the National Council on Teacher Quality examined closely for its report, 12 had adopted policies for using evaluation results to inform decisions about teacher dismissal, layoffs, or tenure. At the same time, “Many states are only explicit about tying professional development plans to evaluation results if the evaluation results are bad.”⁴

Experts observe a similar trend at the school-district level. According to Education Resource Strategies, a nonprofit organization that works with urban districts to improve use of resources for teaching and learning:

*Even when districts and schools have good evaluation information, they usually use it narrowly, focusing primarily on remediation and dismissal. These districts are missing an opportunity to ... help leverage their highest performers and help teachers with strong potential grow into solid contributors.*⁵

Underneath the confusion about what the reforms are really about lie two very different types of strategies for boosting teaching effectiveness in the workforce. The first strategy can be called “movin’ it” because it treats a teacher’s effectiveness as fixed at any given point in time, then uses selective recruitment, retention, and “deselection” to attract and keep teachers with higher effectiveness while removing teachers with lower effectiveness. The resulting “churn” in the workforce raises the average level of effectiveness over time. State policies that base decisions about tenure, layoffs, and dismissal on results of the new evaluations are all “movin’ it” strategies, as are any financial or other incentives to attract or retain highly effective teachers.

In contrast, “improvin’ it” policies treat teachers’ effectiveness as a mutable trait that can be improved with time. When reformers talk about providing all teachers with useful feedback following classroom observations or using the results of evaluation to individualize professional development for teachers, they are referring to “improvin’ it” strategies. If enough teachers improved their effectiveness, then the accumulated gains would boost the average effectiveness in the workforce.

In reality, there is nothing about either strategy that precludes the other. Therefore, instead of treating them as “either/or” choices, smart school systems

Among 17 states that the National Council on Teacher Quality examined closely for its report, 12 had adopted policies for using evaluation results to inform decisions about teacher dismissal, layoffs, or tenure.

would combine “movin’ it” *and* “improvin’ it” policies to maximize increases in teaching effectiveness. In fact, evidence suggests that high-improving and high-performing schools manage to do just that.

Yet some of the nation’s most influential “movin’ it” proponents repeatedly argue that investing in “improvin’ it” strategies would be a waste. They cite research showing that professional development does not significantly improve teaching effectiveness and student learning, and they argue that even if there were good approaches, school districts would not know how to implement them reliably at scale.

Those skeptics have a point. There are very few convincing studies showing that professional development works, and two federally sponsored experimental studies of well-designed programs yielded disappointing results. Yet over the past two years, respected researchers have begun to publish a new crop of well-designed studies that do show substantial improvements in teaching and learning from some forms of professional development.

Policymakers at all levels should seize the opportunity to move beyond the false choice at the heart of this debate and encourage school systems to maximize gains in teaching effectiveness by leveraging a combination of “movin’ it” and “improvin’ it” policies. But that will require leaders at all levels of education to finally confront the long-known fact that the nation’s school systems spend billions of dollars *annually* on wasteful and ineffective professional development.

Federal and state policymakers should incentivize school systems to eradicate ineffectual and unproven professional development and invest in proven models. And because even good models can run into implementation hurdles, they should ask school systems to describe how they will anticipate and prevent hurdles while supporting, overseeing, and monitoring professional development to ensure that it gets the results it should.

Districts should conduct comprehensive audits of all of their investments in professional development to determine whether each investment, and all investments taken together, provides real opportunities for teachers to improve—no matter what their current level of effectiveness. Finally, states and districts implementing new evaluation systems should take every step possible to ensure that the feedback teachers receive from evaluations is as valuable as teachers have been promised. If reformers and education leaders fail to deliver on even that very basic pledge, the current “big bang” of teaching-effectiveness reforms could very well collapse in a “big crunch.”

Debating two strategies for increasing teaching effectiveness

At the heart of the current debate about “teaching-effectiveness reforms” lie two very different types of strategies that school systems *could* leverage to increase the measured effectiveness of the teaching workforce. (See Figure 1 on page 5) The first type of strategy treats each teacher’s effectiveness (or “talent”) as a *fixed attribute* at any given point in time, using personnel policies such as effectiveness-based layoffs to move individuals with lower effectiveness out of teaching positions while keeping individuals with higher effectiveness in their positions. In theory, selective recruitment, retention, and dismissal policies would create a salutary “churn” among teachers, increasing the overall amount of measured effectiveness in the workforce over time.

The second type of strategy treats each teacher’s measured effectiveness as a *mutable attribute* that can be improved with time. Providing teachers with professional development, coaching, and feedback from classroom observations would enable them to acquire knowledge and skills that have a positive impact on the measures included in the new evaluations. In theory, incremental improvements in effectiveness among individual teachers would boost the overall amount of measured effectiveness in the entire teaching workforce over time.

Sociologists and economists who study human capital call the first type of strategy “selection” and the second “development.” But a more memorable way to think of them might be “movin’ it” and “improvin’ it.”

From a purely practical perspective, nothing about either type of strategy precludes the other. Indeed, common sense suggests that any state or district wanting to boost effectiveness as much as possible would deliberately leverage a combination of “movin’ it” *and* “improvin’ it” policies. Moreover, unless a district managed to poach large numbers of highly effective teachers from its neighbors, “movin’ it” policies alone seem unlikely to significantly increase the amount of highly effective teaching research shows can close achievement gaps.

Furthermore, evidence suggests that good schools leverage both kinds of strategies. An analysis of a group of high-improving schools in Chattanooga, Tennessee, for example, found that large gains in value-added effectiveness resulted more from improvement among existing teachers than from weeding out weak teachers and recruiting stronger ones, as some news stories had claimed.⁶ A study of high-performing schools in Miami-Dade County revealed that they recruit and retain more effective teachers than other schools, but teachers working in those schools were able to improve their effectiveness at faster rates as well.⁷

Despite such evidence, public discussions about teaching-effectiveness reforms often seem like a debate between warring camps that favor one type of strategy over the other, and, at least on the policy front, the “movin’ it” camp appears to be winning.

FIGURE 1
Two types of strategies for boosting effectiveness in the teaching workforce

Movin’ it	Improvin’ it
1) Treats each individual’s measured effectiveness as a “fixed” trait at key points in time	1) Treats each individual’s measured effectiveness as a “mutable” trait that can improve over time
2) Selectively recruiting, retaining, and removing teachers based on their measured effectiveness at a given point in time, so that <ul style="list-style-type: none"> • entrants are more effective • stayers are more effective • leavers are less effective 	2) Providing teachers with support, assistance, or feedback to enhance knowledge and skills linked to measured effectiveness
3) Leveraging: <ul style="list-style-type: none"> • Effectiveness-based layoffs • Dismissal of persistently ineffective teachers • Granting tenure based on effectiveness • Financial or other incentives to retain highly-effective teachers • Recruiting and hiring teachers based on measured effectiveness or factors that predict higher effectiveness 	3) Leveraging: <ul style="list-style-type: none"> • Professional development, instructional coaching, mentoring • Using information from teacher evaluations to better plan and target professional development for individual teachers or groups of teachers • Providing useful feedback to teachers following classroom observations
4) Creating a salutary “churn” within the teacher workforce that produces mathematical increases in the aggregate amount of effectiveness over time	4) Increasing the aggregate amount of effectiveness in the workforce by accumulating individual-level gains in measured effectiveness over time
5) Core mechanism = “churning”	5) Core mechanism = “learning”

Source: Author

While national teachers unions do not deny the need for some “movin’ it” policies such as dismissal of persistently ineffective teachers, they strongly favor policies that can help teachers acquire knowledge and skills valued by the new evaluations. “Teacher evaluation must always be, first and foremost, about the continuous improvement of teaching in every classroom,” Randi Weingarten, president of the American Federation of Teachers, wrote in response to the National Council on Teacher Quality report. “These systems need to focus on the growth of teachers during the school year and throughout their careers, not simply on end-of-year personnel decisions.”⁸

But influential “movin’ it” proponents dispute such claims, expressing strong skepticism that strategies such as professional development can significantly increase teaching effectiveness. Last year the Columbia University economist Jonah Rockoff told a journalist for the *New York Times Magazine* that he favored policies to reward effective teachers while removing ineffective ones because of the lack of evidence that training can help teachers improve.⁹ Similarly, Harvard University researchers Matthew Chingos and Paul Peterson wrote in the June issue of *Economics of Education Review* that, “In general, we find that it is easier to pick a good teacher than to train teachers to make them more effective.”¹⁰

The expert who most persistently challenges claims by “improvin’ it” proponents is arguably the one whose research on “movin’ it” is most widely cited, Stanford University economist Eric Hanushek. In a 2009 essay called “Teacher Deselection,” Hanushek painted the benefits of dismissing ineffective teachers in such appealing terms that his research was later cited by Bill Gates on *The Oprah Winfrey Show*. Hanushek estimates that removing the least effective 6 to 10 percent of American teachers would improve student achievement enough to elevate U.S. rankings close to the top on international assessments of learning. That accomplishment, in turn, would increase America’s gross domestic product—the largest measure of our nation’s economy—by an additional 1.6 percent in 20 years, adding hundreds of billions of dollars to the nation’s economy.¹¹

Hanushek’s “Teacher Deselection” study joined a fast-growing body of research offering evidence that “movin’ it” strategies can increase teaching effectiveness and student achievement. That evidence has had a major impact on policymaking, especially new policies related to teacher tenure, layoffs, and dismissal. (Figure 2 on page 7 summarizes several of the more influential studies.) But authors of “movin’ it” studies also frequently have much to say about research evidence to support “improvin’ it” strategies, or, more precisely, the lack of such evidence.

While national teachers unions do not deny the need for some “movin’ it” policies such as dismissal of persistently ineffective teachers, they strongly favor policies that can help teachers acquire knowledge and skills valued by the new evaluations.

FIGURE 2

Influential “movin’ it” studies

<p>Tenure</p>	<p>Robert Gordon, Thomas J. Kane, and Douglas O. Staiger, “Identifying Effective Teachers Using Performance on the Job” (Washington: The Brookings Institution, 2006). The authors recommended that after two years on the job, the bottom quarter of ineffective teachers should be denied tenure and thus not be permitted to continue teaching. Based on an analysis of data from Los Angeles, the authors estimated that the net increase in teaching effectiveness would generate a 1.2 increase in student test score gains per year.</p> <p>Moreover, if the impact of more-effective teaching in the early grades persisted through high school (which the authors conceded to be an unproven hypothesis), the policy would raise student test scores roughly 14 percentile points by graduation, which in turn would increase earnings of a national graduating class by \$216 billion to \$507 billion per year.¹²</p>
<p>Layoffs</p>	<p>Several recent studies have, taken together, built a convincing case for making layoff decisions based on effectiveness.¹³ Two of the most commonly cited are:</p> <ul style="list-style-type: none"> • Donald J. Boyd, Hamilton Lankford, Susanna Loeb, and James H. Wyckoff, “Teacher Layoffs: An Empirical Illustration of Seniority vs. Measures of Effectiveness” (Washington: The National Center for Analysis of Longitudinal Data in Education Research, July 2010). The authors used a database on New York City teachers and students to simulate the impact of laying off teachers based on effectiveness determined by value-added measures¹⁴ versus seniority. Had teachers been laid off in 2007 based on a value-added system, they would have been 36 percent of a standard deviation of student achievement less effective than those teachers who would have been laid off based on seniority. The authors then followed those groups for two additional years to investigate whether there were persistent differences in effectiveness. Two years later, teachers who would have been laid off based on effectiveness measures were still 12-19 percent of a standard deviation of student achievement less effective than teachers who would have been laid off based on seniority.¹⁵ • Dan Goldhaber and Roddy Theobald, “Assessing the Determinants and Implications of Teacher Layoffs” (Seattle, WA: Center for Education Data & Research, July 2010). The authors estimated that teachers laid off under an effectiveness-based policy would have been 20 percent of a standard deviation in student performance less effective than teachers who actually were laid off under current policies in Washington State over the previous two years.
<p>Dismissal</p>	<p>Eric A. Hanushek, “Teacher Deselection,” in <i>Creating a New Teaching Profession</i>, edited by D. Goldhaber and J. Hannaway (Washington: Urban Institute Press, 2009). The author estimated that removing the least effective 6-10 percent of American teachers would improve student achievement enough to elevate U.S. rankings close to the top on international assessments, which in turn would increase America’s gross domestic product by an additional 1.6 percent in 20 years. To put the gains in perspective, the author noted that 1.6 percent of the gross domestic product equaled about \$200 billion in 2005, close to the \$233 billion U.S. school systems spent on instructional salaries and benefits that year, “suggesting considerable room to pay for better teachers and to compensate for the higher risk of entering teaching.”¹⁶</p>

Source: Author

In the same “Teacher Deselection” article, for example, Hanushek dismissed “improvin’ it” strategies as a waste of time and resources. “In the long run, it would probably be superior to develop systems that upgrade the overall effectiveness of teachers [through] induction programs, mentoring, professional development, and the like,” Hanushek conceded.¹⁷ But he argued that recent research and experience

suggest many professional-development initiatives have failed to improve student learning, and good programs have been difficult to implement at scale.

Hanushek has since reiterated that argument in several online forums where his ideas were being debated, including the influential *Shanker Blog* and *Eduwonk* blog. “The best would be to transform teachers—through coaching, professional development, or what have you—into better teachers,” Hanushek wrote in the comments section of the *Shanker Blog* last year. “Unfortunately, we have been unable to find a way to do that systematically and consistently.”¹⁸

So far, “improvin’ it” proponents have failed to respond directly to Hanushek’s challenge that professional development cannot improve teaching effectiveness. But they should. Over the past two years, several groundbreaking new studies offered strong evidence that professional development can significantly improve teaching effectiveness and student achievement. Those same studies are providing fresh insights into how schools and districts might begin to take steps to ensure that good professional development delivers reliable results at scale.

Revisiting recent evidence on professional development

The question is not whether *current* professional development improves teaching and learning. In fact, there is near universal agreement that it does not, and recent studies support that consensus. Education policy professor Douglas N. Harris of the University of Wisconsin-Madison and economist Tim R. Sass of Florida State University recently analyzed a statewide database on teachers in Florida and found that “in-service professional development has little to no effect on the ability of teachers to improve student achievement, with the possible exception of middle school math.”¹⁹ Therefore, the question is whether professional development *could* significantly improve teaching and learning if it were much better designed and delivered than what most teachers experience today.

Beginning in 2007 several major studies of professional development delivered only mixed or discouraging findings. That year a team of scholars at the American Institutes for Research published an extensive review of existing studies on professional development.²⁰ Remarkably, out of more than 1,300 studies they analyzed, only nine met the standards for rigorous research evidence established by the federal What Works Clearinghouse. All nine were fairly small in scale, and three were unpublished doctoral dissertations.

The good news was that eight of the nine studies showed a positive impact on student achievement. On average, providing teachers with an average of 49 hours of professional development boosted students’ achievement by 21 percentile points. The bad news was that “the limited number of studies and the variability in their ... approaches preclude any conclusions about the effectiveness of specific professional development programs.”²¹

According to the American Institutes for Research scholars, the main message was the need to address “the paucity of rigorous studies” directly examining whether professional development can improve student learning. On that theme, the scholars concluded on a hopeful note: The U.S. Department of Education’s Institute of Education Sciences was sponsoring two large-scale experimental studies of well-designed professional development programs that might answer questions the AIR review could not.

Unfortunately, the results of those federally sponsored studies turned out to be disappointing, even though the approaches were designed according to the best research and many teachers received exceptionally large doses of professional development. The first experiment examined the impact of a professional-development program for second grade reading teachers delivered through an institute, seminar days, and extensive in-school coaching. Although the program did improve teachers' knowledge about scientifically based reading instruction, it did not have the full impact on classroom practices the developers had hoped for, and it did not improve students' reading scores.²²

The second experiment examined the impact of a professional-development program for seventh grade math teachers that sought to improve their effectiveness in teaching topics like fractions and decimals that are an essential foundation for algebra. One group of teachers who participated for two years received an average of 77 hours of professional development including in-school coaching. Elizabeth Warner, an economist at the Institute of Education Sciences who directed the research, called the program “far more intensive and extensive—and better—than typical professional development.”²³ Nevertheless, while the program had a minor impact on classroom practices, it had no impact on teachers' knowledge about mathematics, ability to teach math, and students' learning.²⁴

Those findings could not have been more discouraging, especially coming from such expensive, intensive, and well-designed approaches. “The PD [professional development] program in the study had all the features that accumulated research to date said are important to making PD effective,” Andrew Wayne, one of the researchers, told *Education Week* in May. “The biggest takeaway is that we don't yet know how to use professional development at a large scale to reliably improve teacher knowledge and student achievement.”²⁵ Not surprisingly, Hanushek and other “movin' it” proponents have cited these federally funded studies as evidence of the failure of professional development.²⁶

Yet over the past two years, several other well-designed studies have begun to offer new hope that professional development *can* have a significant impact on teaching and learning. Two of them focused on types of “job-embedded professional development” that are becoming increasingly popular with educators, like collaborative teaming and instructional coaching. In December 2009 a group of researchers published a study in the *American Education Research Journal* providing the first “quasi-experimental” evidence that providing time and support for teachers to meet in collaborative teams can increase student achievement if those teams follow a protocol for solving explicit problems with students' learning.²⁷

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In September 2010 a team of researchers published a study in the *Elementary School Journal* showing that certain kinds of instructional coaching can significantly boost teaching effectiveness and students' value-added learning gains.²⁸ The team included Anthony Bryk, a well-known scholar who founded the influential Chicago Consortium on School Research and who currently serves as president of the Carnegie Foundation for the Advancement of Teaching. The researchers examined the impact of a coaching model called Literacy Collaborative among 287 teachers and 8,576 students in 17 schools across eight eastern states.

The coaching boosted students' value-added learning gains by 32 percent during the third year. Moreover, because the study's design allowed the researchers to compare learning gains in each teacher's classroom from the year before the program began through the third year of coaching, researchers also could examine the impact on individual teachers' effectiveness. The results offer a clear challenge to "movin' it" proponents who argue that professional development cannot help teachers improve: "The vast majority of teachers in most of the participating schools showed substantial value-added effects by the end of the study."²⁹

In August *Science* published positive results from an experimental study of MyTeachingPartner, an online instructional coaching program that uses the Classroom Assessment Scoring System, or CLASS, developed by Robert Pianta and his colleagues at the University of Virginia. After receiving training on CLASS, secondary school teachers shared two video recorded lessons per month with trained coaches called "consultants." The consultants selected segments that illustrated positive practices or areas for growth on dimensions of CLASS and posed questions to teachers that encouraged them to analyze the relationship between their behaviors and students' reactions. During follow-up phone calls, the teachers and consultants strategized about ways to enhance instruction based on CLASS.

Pianta and his colleagues found that the program had a positive impact on secondary students' test scores the year following coaching. The impact was substantial, equivalent to scoring at the 59th percentile rather than the 50th percentile on Virginia's statewide assessments.³⁰ Those results are significant in part because many districts are considering adopting CLASS as part of new teacher-evaluation systems, and the federal Institute of Education Sciences recently chose CLASS as one of two classroom-observation instruments for a new \$18 million study of the effects of overhauling teacher evaluations in 20 school districts.³¹ Pianta provides a detailed overview of research on MyTeachingPartner and other CLASS-based professional development initiatives in "[Teaching Children Well: New Evidence-Based Approaches to Teacher Professional Development and Training](#)," published by the Center for American Progress in November 2011.

Why good professional development can get uneven results

Taken together, these studies offer a strong rejoinder to Hanushek’s challenge that research shows professional development cannot improve teachers’ measured effectiveness or student learning. And the study of coaching conducted by Bryk and his colleagues suggests that it is possible to envision implementing effective professional development with at least fairly reliable results in multiple schools across multiple states.

However, the same coaching study also highlights the difficulty of implementing good professional development models with high levels of consistency across schools. In a follow-up analysis, Bryk and University of Virginia researcher Allison Atteberry reported that the amount of coaching teachers received varied substantially across teachers and schools in the study. Teachers in one school received an average of over 40 one-on-one coaching sessions by the end of the study, while those in another school averaged only nine. Across the 17 schools teachers participated in an average of 0.79 coaching sessions per month, significantly less than the two sessions per month recommended in the program’s guidelines.³²

In a June 2010 presentation for the federal Institute of Education Sciences, University of Oregon assistant professor Gina Biancarosa told “a tale of two schools” to illustrate the possible impact of such variability.³³ Even though Riverside and Tyson William elementary schools (pseudonyms for the two schools she analyzed) had the same number of teachers and coaches, teachers at Riverside received far more coaching than their colleagues in Tyson William. At Riverside, students’ value-added gains started out below average and improved significantly over the course of the study; Tyson William’s value-added gains started out above average but deteriorated over the three years.

Despite such variations, Literacy Collaborative coaching made a huge difference for many teachers and students, significantly boosting the value-added effectiveness of most teachers in most of the participating schools. But Bryk and Attewell point out that Literacy Collaborative is a mature program over 10 years old, includes

detailed standards for implementation, and requires significant training and support for coaches. Therefore, “It is reasonable to expect that in other coaching initiatives, which tend to be less well specified, even wider variation will result.”³⁴

Thus, fully addressing Hanushek’s challenge will require more than simply proving that professional development can improve teaching and learning. Those who advocate for robust “improvin’ it” policies also will need to get much clearer about how and why potentially effective professional development sometimes works and sometimes fails. “In this regard, knowing that a program *can* work is not good enough,” Bryk observes, arguing, “We need to know *how to make it work* reliably over many diverse contexts and situations.”³⁵

One oft-cited reason for unreliable results is sloppiness in implementing proven programs as designed. In other words, fidelity matters. Without a great deal of guidance and support from the developers of a model or someone else who understands the model well, school and district leaders often are unsure which elements are critical for success and which can be adapted to help the model better fit the local context. When they adapt or discard a critical element, they get results that are predictably disappointing.

But other recent research suggests that the context in which professional development takes place matters, too. Lack of time to learn and practice new techniques, lack of understanding and support from the principal, or a professional culture hostile to collaboration and improvement can undermine professional development that might, in a more hospitable environment, improve teaching and learning.

In their follow-up analysis published in the *Elementary School Journal* in December 2011, Bryk and Attewell examined possible reasons for the variable doses of coaching teachers received. Predictably, because each school was assigned one coach regardless of the size of its faculty, the biggest factor was variation in the coach-to-teacher ratio across schools. But teacher attitudes and school culture also mattered. Teachers who felt a stronger commitment to their schools and greater responsibility toward their colleagues received significantly more coaching sessions regardless of school size. Teachers also received more coaching in schools where the coach reported that the principal was supportive of the professional development and where teachers shared greater influence with principals in decision-making.³⁶

Those findings echo other research findings about how school leadership and culture can make or break professional development. Two recent studies by

One oft-cited reason for unreliable results is sloppiness in implementing proven programs as designed. In other words, fidelity matters.

University of Pittsburgh researcher Lindsay Matsumura and colleagues found that strong principal leadership was the “key resource” in determining whether a new instructional-coaching program flourished or faltered in 15 southwestern schools.³⁷ After interviewing 85 teachers in 14 urban schools, Megan Charner-Laird, a researcher with Harvard University’s Project on the Next Generation of Teachers, concluded that the ultimate success or failure of coaching depended on school context. In some schools “there is likely to be little learning associated with the coaching experience,” she says.³⁸

In contrast, giving principals too much responsibility for professional development can undermine its effectiveness as well. During the first two years of the quasi-experimental study of collaborative teams cited above, principals were tasked with establishing the teams and given training and support to implement the program. Soon though “it became clear that a ‘train the principal’ approach yielded little implementation, ineffective teacher teams, or no gains in student achievement,” researchers concluded.³⁹ When teacher-leaders were given direct responsibility for facilitating the teams in the third year of the study, along with a protocol for guiding team activities, the professional development began to have a positive impact on student achievement.

Clearly, a major challenge in getting good school-based professional development to work at scale is finding the right role for principals. Although principals need to be supportive of professional development for it to succeed, many simply do not have enough time to be “hands on” facilitators of every professional-development activity.

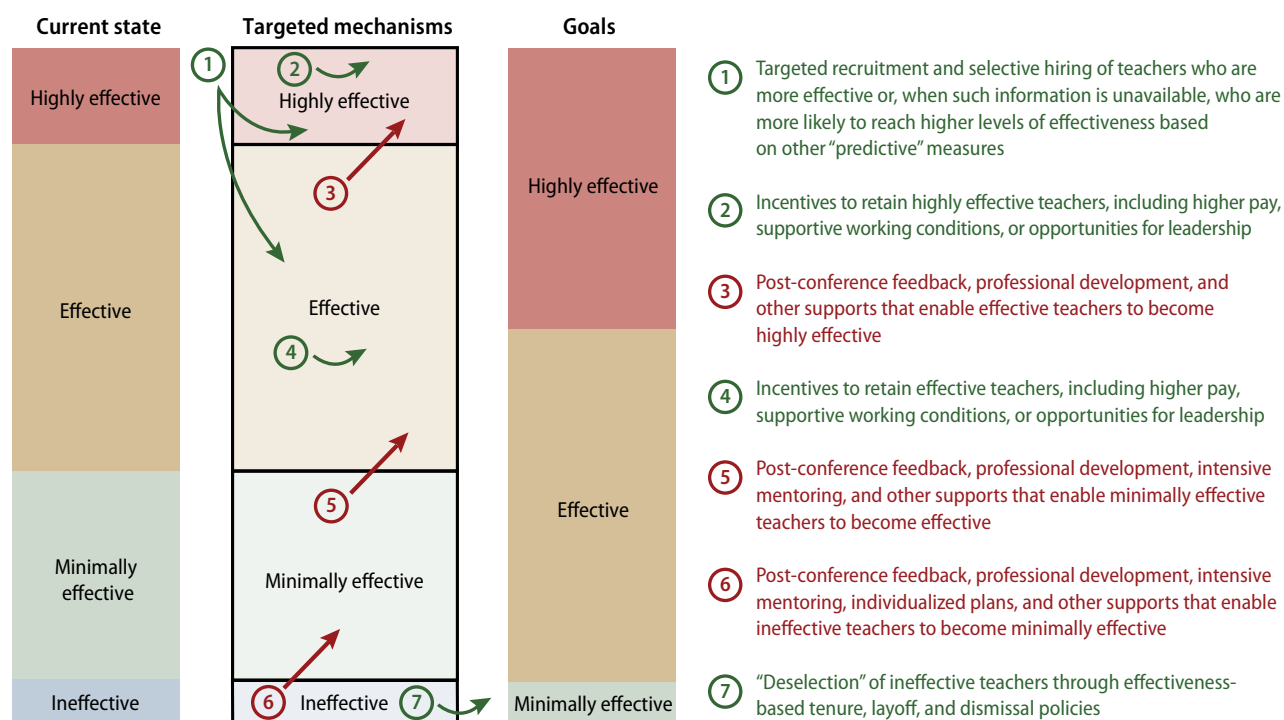
One promising approach has been pioneered by the so-called TAP System for Teacher and Student Advancement, in which master and mentor teachers serve with the principal on a school leadership team that manages professional development as well as teacher evaluation. In schools implementing TAP, principals play a kind of “executive” role in planning and monitoring professional development, but master teachers and mentor teachers perform the day-to-day work of coaching teachers and leading collaborative teams. According to a forthcoming report on professional development by the National Institute for Excellence in Teaching, which manages TAP, “Principals need a clear and robust role to play so they can be supportive of teacher professional development, but one that is feasible given all of their other job responsibilities.”⁴⁰

A comprehensive approach to increase teaching effectiveness

Policymakers and education leaders should seize the opportunity offered by new research on professional development to move beyond the false choice about whether to implement “movin’ it” or “improvin’ it” strategies. The evidence suggests that *both* kinds of strategies would help boost teaching effectiveness, which means that leveraging them together would deliver even greater gains for students. Education leaders can begin by outlining a comprehensive policy agenda that sets specific goals and designates concrete mechanisms for achieving those goals. Figure 3 suggests one way they might approach such a task.

FIGURE 3
Establishing goals and selecting mechanisms to increase effectiveness

Curved green arrows represent “movin’ it” strategies while straight red arrows represent “improvin’ it” strategies. Following are examples of the kinds of mechanisms school systems might decide to leverage under each arrow:



Source: Author

Education leaders can establish goals for increasing teaching effectiveness based on the various levels of effectiveness a school system has formally established for its new evaluation system. The example in Figure 3 uses four levels because many school systems are adopting four-tiered evaluation systems and, simply for the sake of illustration, borrows the District of Columbia’s nomenclature of “highly effective,” “effective,” “minimally effective,” and “ineffective.” Some school systems might only aim to eliminate ineffective teaching, but others might aim to ensure that all teaching, or as much as practically possible, meets the definition of effective teaching established under the new evaluation system. Still other school systems might aim to increase the proportion of highly effective teaching by a certain amount.

Education leaders should also identify specific “movin’ it” and “improvin’ it” policy mechanisms for accomplishing each goal. As depicted in Figure 3, multiple mechanisms can be applied under each of the arrows depicting targeted strategies for increasing effective teaching and decreasing ineffective teaching. A school system, for example, might decide to use a combination of diagnostic feedback from observations and professional development to double the amount of highly effective teaching.

During this step, education leaders should consider whether and how to adapt each kind of mechanism to each specific goal. While some forms of professional development might work equally well for teachers of varying levels of effectiveness—especially any mechanism that has “individualization” built in—other mechanisms might need to be tailored to help different groups of teachers advance from one tier to the next.

Finally, school systems should consider all of the ways that each mechanism might fail and take steps to ensure it delivers results. Since “improvin’ it” strategies have received less attention in policymaking due to skepticism that they can work at all, the rest of this paper focuses on problems and possible solutions for ensuring that “improvin’ it” strategies achieve their desired results.

Ensuring that “improvin’ it” strategies deliver results

This section examines two “improvin’ it” mechanisms likely to be selected by most school systems:

- Feedback from formal observations conducted as part of new teacher-evaluation systems
- Professional development

Let’s examine each in turn.

Feedback from observations

If teachers have been promised one thing from the new evaluations of their effectiveness, it is that they will receive helpful feedback in post-conferences following observations. The recent study of MyTeachingPartner suggests that we know what good feedback looks like. It should take the form of a conversation between observers and teachers where observers ask questions that encourage teachers to strategically analyze the impact of their practices on students’ learning, followed by a strategy session that helps teachers plan how they will build on areas of strength and address an area targeted for improvement. We also know that when teachers receive such feedback, their teaching improves and their students benefit significantly.⁴¹

Yet there are worrying signs that districts might not be taking strong enough steps to ensure that teachers receive high-quality feedback from new evaluation systems. In November the Consortium on Chicago School Research released findings from the first systematic examination of “live” post-conferences, conducted as part of a study of the new teacher-evaluation system being piloted by Chicago Public Schools.⁴² Alarmingly, only 10 percent of questions principals asked teachers during post-conferences encouraged serious reflection about instructional practices.

Indeed, instead of eliciting a conversation with teachers, principals talked for three-quarters of the time. Some principals even admitted to “dumbing down” questions for teachers who had difficulty reflecting on their practice, rather than coaching those teachers on how to analyze their instructional choices.

According to cognitive scientists who have studied expert performance in a wide variety of fields, high-quality feedback is the key resource for novice performers to become competent and for competent performers to become experts.⁴³ At an absolute minimum, any state, district, or school that claims to be “improvin’ it” and not just “movin’ it” must get this component of the new evaluation systems right. Policymakers and education leaders should take concrete steps to ensure that observers:

- Can accurately judge classroom lessons in order to provide accurate feedback
- Know what high-quality feedback looks like
- Understand the “theory of action” behind how feedback helps teachers grow
- Can provide the kind of feedback and “cognitive coaching” that improves measured effectiveness⁴⁴

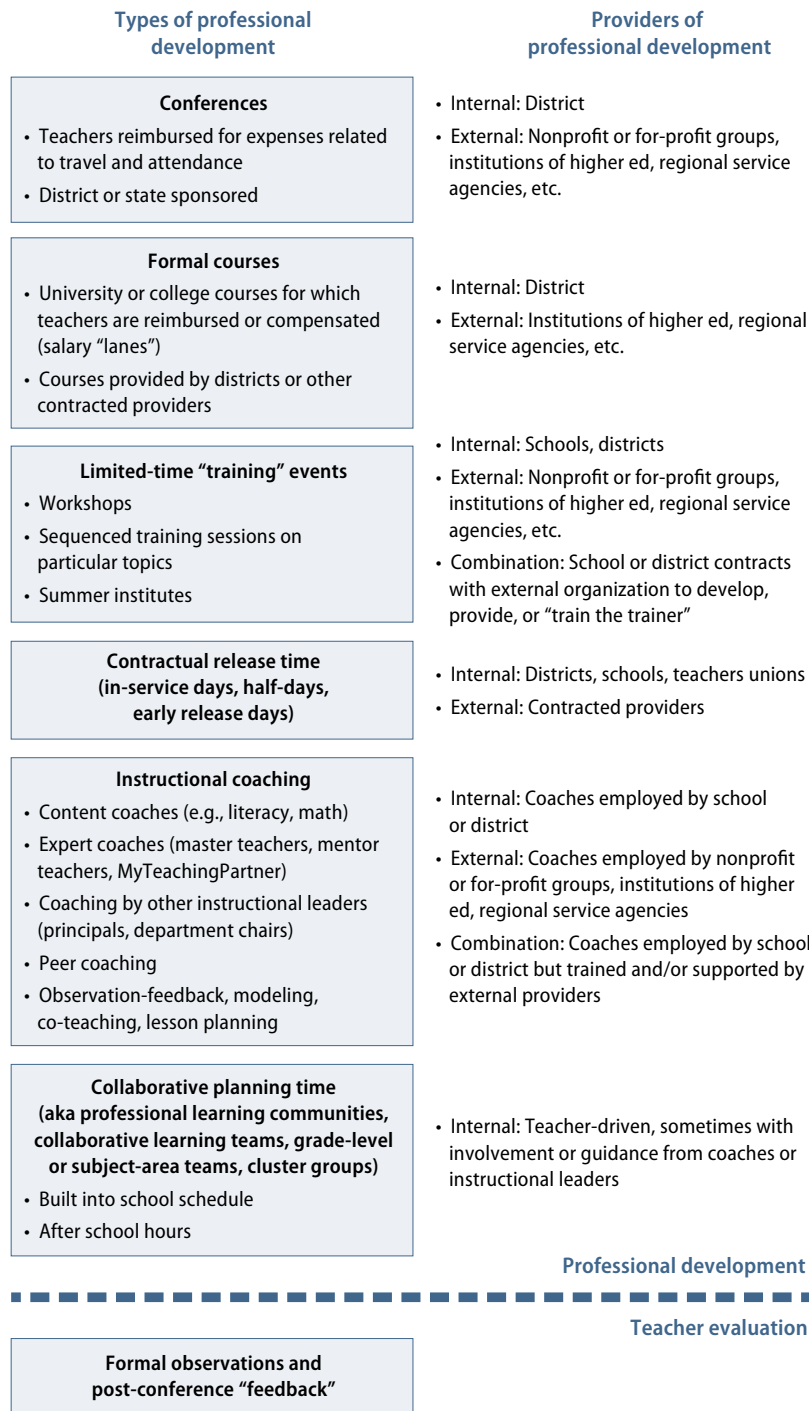
Professional development

The first step in exploiting professional development to improve measured effectiveness is acknowledging the many forms professional development can take in any particular district. Consider the wide variety of activities shown in Figure 4, which is based partly on a cost framework developed to help school systems analyze what they actually spend on professional development.⁴⁵ School systems will need to keep all relevant investments, activities, and providers in mind as they confront the problems described below.

The first step in exploiting professional development to improve measured effectiveness is acknowledging the many forms professional development can take in any particular district.

FIGURE 4

Types of professional development in a typical large district



Source: Author. Based in part on A. Odden and others, “A Cost Framework for Professional Development,” *Journal of Education Finance* 28 (Summer 2002): 51-74.

Problems to overcome to ensure effective professional development

There are at least four major problems that researchers have identified with respect to professional development. Specifically:

- Professional development activities are not aligned with policies for evaluating teachers
- When contracting with outside providers of professional development, school systems invest in services that are unproven or even proven ineffective.
- School context can undermine even the best-designed professional development.
- Spending on professional development is haphazard and uncoordinated.

Let's examine each in turn to see how they might be overcome.

Problem: Professional development activities are not aligned with policies for evaluating teachers

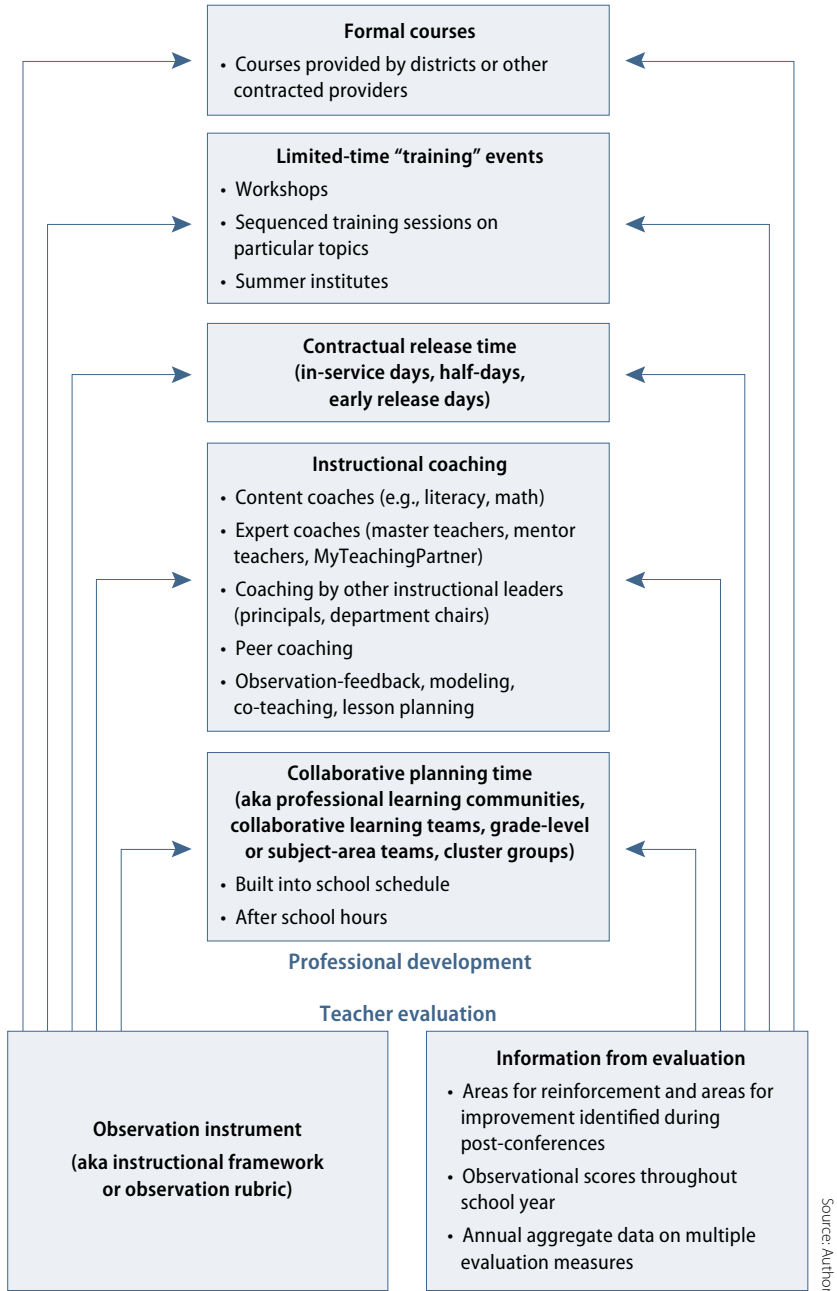
As pointed out by the author in a Center for American Progress July 2009 publication, "Aligned by Design: How Teacher Compensation Reform Can Support and Reinforce Other Education Reforms," major "human resource" policies tend to be extremely fragmented in American education. "For teachers in most schools, evaluation 'happens,' professional development 'happens,' getting paid 'happens,' ... But none of those experiences has much to do with any of the others. And each demands and rewards a different and unrelated set of behaviors."⁴⁶

The key to aligning evaluation and professional development is identifying concrete points of articulation that allow policies and programs in each area to support and reinforce policies and programs in the other.⁴⁷ Two elements of the evaluation system can easily be exploited to create such points of articulation, much like the screws that come with a piece furniture requiring assembly: information from evaluations and the instrument used to conduct formal observations itself. (see Figure 5 on page 21)

First, results from the evaluation system can be used to plan professional-development activities for groups of teachers and to tailor professional development to each individual's needs. Case in point: Principals and coaches in TAP System schools and in the District of Columbia public schools report being able to analyze aggregate evaluation data to pinpoint which areas of the evaluation framework teachers are weakest in, then plan professional development sessions

targeting those areas. As districts and states begin to develop similar data systems for evaluation results, they will be able to conduct similar analyses to inform broader professional development planning.⁴⁸

FIGURE 5
Aligning evaluation and professional development



If districts or schools have invested in instructional coaches, the coaches can provide follow-up support to teachers on areas of the framework that were identified for targeted improvement during post-conferences following observations. That can be easier to accomplish when coaches also conduct formal observations under the evaluation system, as is the case with master teachers and mentor teachers in TAP schools, but if not, school systems can at least make evaluation results available to coaches. Unfortunately, some districts have rules forbidding evaluators to share such results with instructional coaches; such outdated “firewalls” between evaluation and professional development should be eliminated wherever possible.⁴⁹

Coaching is not the only option for tailoring professional development to an individual teacher’s evaluation results. The Office of Staff Development for Hillsborough County public schools in Tampa, Florida has undertaken an effort to align its online and in-person course offerings with the *Framework for Teaching*, the formal observation instrument Hillsborough uses for its new evaluation system, which will allow teachers to choose in-service courses that match their targeted areas for growth in the *Framework*. In fact, data from evaluations could inform individual and group planning for every kind of professional development shown in Figure 5.

The second element is the classroom-observation instrument used for evaluation, which creative schools and districts can find many ways to incorporate into the various kinds of professional development shown in Figure 5. (Observation instruments can go by many names, including “frameworks” and “rubrics.”) In TAP System schools, for example, master teachers “field test” new instructional strategies in a sample of classrooms before introducing them to teachers in weekly professional-development team meetings, and the field testing often identifies ways in which areas of the *TAP Rubric* can help teachers implement the new strategies. Then, when they facilitate the team meetings, master teachers highlight those connections for teachers and “model” how the area of the *Rubric* supports the new strategy.

Whatever the approach to each type of professional development shown in Figure 5, district and school personnel should consider how to incorporate the instructional framework into it so teachers have meaningful opportunities to improve their measured effectiveness. Consider contractual in-service time, during which principals or other instructional leaders could facilitate “deep dives” into specific areas of the evaluation framework or teachers could volunteer to screen video-recorded lessons for feedback from their peers. The latter activity would deepen teachers’ understanding of the evaluation framework while giving them an opportunity to hone their ability to critically analyze classroom practices, exactly the kinds of knowledge and skills essential for benefitting from high-quality feedback in evaluation post-conferences.

Aligning evaluation with professional development will do little to boost teaching effectiveness unless school systems take serious steps to significantly improve the professional-development activities available to teachers.

Finally, districts and schools should take care to identify any additional instructional frameworks that coaching or other professional-development programs might be using. If teachers are evaluated on one instructional framework and receive coaching or other training based on a different framework—for example, a framework for literacy instruction—they will receive conflicting signals about how to invest precious time and energy toward improvement. When potential conflicts are identified, instructional leaders responsible for professional development can “map” the practices in the evaluation framework onto the other framework so that teachers can see how practices in one framework support and reinforce practices in the other.

Of course, aligning evaluation with professional development will do little to boost teaching effectiveness unless school systems take serious steps to significantly improve the professional-development activities available to teachers. Consider the study by Harris and Sass described above, which found that teachers in Florida spent many hours in professional development activities that did not improve their effectiveness. (see page 9)

Problem: When contracting with outside providers of professional development, school systems invest in services that are unproven or even proven ineffective

Now that rigorous research is finally beginning to prove some professional-development models are effective, federal and state officials should provide extra funding to districts or schools that agree to adopt proven models. In time it might even be possible to require that such funds only be spent on proven models, though there still are probably too few for such an option to seem politically feasible to many policymakers.⁵⁰

For now, though, policymakers can consider several kinds of funding incentives, including the following:

- Offer school systems that have invested in proven models additional funding the following year
- Offer additional funding to schools and districts that can show convincing evidence that professional development has improved measured teaching effectiveness

Such incentives will not solve the problem entirely, but they will send a strong signal that the primary goal of professional development should be to produce measurable increases in teaching effectiveness.

Problem: School context can undermine even the best-designed professional development

As described above, research and experience have offered very clear “reality checks” that context matters and that even the best-designed professional development initiatives can encounter serious implementation hurdles. Therefore, policymakers must begin to encourage local education leaders to anticipate foreseeable problems and prevent them before they occur.

While that might sound like a daunting objective, it is possible to imagine tools that can help education leaders begin to create such plans. University of Pennsylvania scholar Laura M. Desimone makes a compelling case that there is an emerging consensus among researchers concerning a common framework for evaluating the impact of professional development:⁵¹

- First, teachers receive high-quality professional development
- Second, professional development equips teachers with new knowledge and skills
- Third, teachers transfer their new knowledge and skills into new or improved teaching practices
- Fourth, those practices boost student learning

Anthony Bryk refers to these steps as a “causal cascade” by which professional development improves student achievement.⁵²

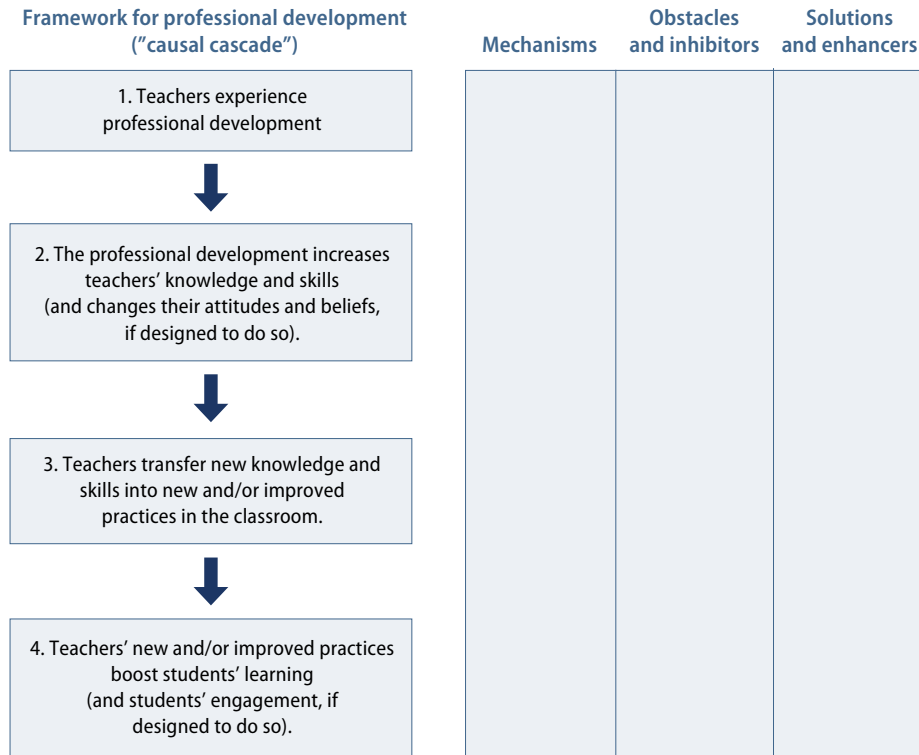
While researchers use the framework to evaluate professional development after implementation, education leaders and policymakers could use the framework as a tool for planning implementation. Figure 6 on page 25 suggests one possible way that education leaders might use the concept of the “causal cascade” to identify potential obstacles that might occur at each step of professional development. Figure 7 on page 25 then suggests how they might use it to identify specific ways that school systems can support, oversee, and monitor professional development to ensure it delivers results.

Federal and state officials could require that schools and districts receiving funds for professional development use such tools to describe specific steps they will take to increase the likelihood that professional development funds will not be squandered.

Policymakers
must begin to
encourage local
education leaders
to anticipate
foreseeable
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prevent them
before they occur.

FIGURE 6

Re-purposing a framework for evaluating professional development to anticipate and prevent implementation problems



Source: Author. Based on a framework described in L.M. Desimone, "Improving Impact studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures," Educational Researcher 38 (3) (2009): 181-199.

FIGURE 7

Re-purposing the framework for evaluating professional development to identify ways to support, oversee, and monitor the success of professional development

Framework for professional development ("causal cascade")	Support Enablers and enhancers	Oversee Who? How?	Monitor Who? How? When?
1. Teachers experience professional development			
2. The professional development increases teachers' knowledge and skills (and changes their attitudes and beliefs, if designed to do so).			
3. Teachers transfer new knowledge and skills into new and/or improved practices in the classroom.			
4. Teachers' new and/or improved practices boost students' learning (and students' engagement, if designed to do so).			

Source: Author. Based on a framework described in L.M. Desimone, "Improving Impact studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures," Educational Researcher 38 (3) (2009): 181-199.

Problem: Spending on professional development is haphazard and uncoordinated

Last year *Education Week* writer Stephen Sawchuk reported an astonishing fact: “A number of researchers discovered school districts rarely have a good fix on how much they actually spend on such training—or on what that spending buys in the way of teacher or student learning.”⁵³ Part of the problem is the hodgepodge of various activities that count as professional development as seen in Figure 4 on page 19, many of which are supported by different funding streams and involve different kinds of providers.

If professional development is going to help teachers improve their effectiveness, then education leaders need a better idea of how much they spend, what they spend it on, and what all those dollars actually buy them. States, districts, and even schools should analyze their investments in professional development to examine how well they support improvements in teachers’ measured effectiveness, including direct expenditures (money) and indirect expenditures (time). The Massachusetts-based nonprofit Education Resource Strategies has helped several large school districts conduct such analyses and has published various guides to help school systems get started.⁵⁴

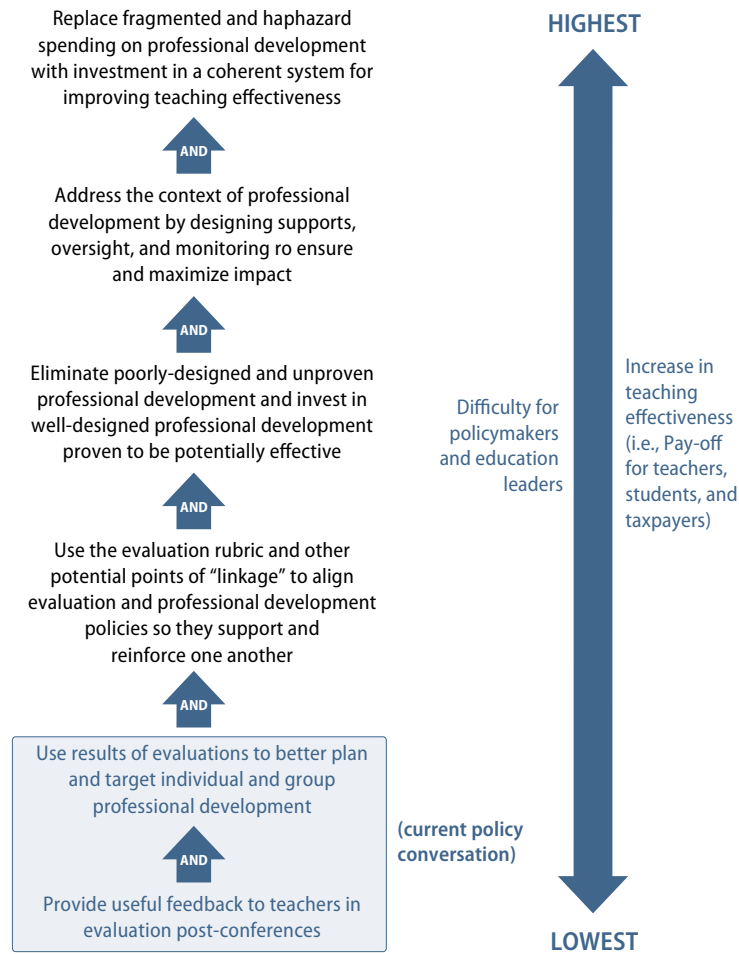
The ultimate goal should be to replace haphazard and uncoordinated spending on professional development with deliberate investment in a coherent system for improving teaching effectiveness. No one has a clear idea of what such a system might look like, but school systems can begin the journey by taking the following steps:

- Analyze the extent to which individual investments help teachers improve their measured effectiveness and the extent to which they can be redesigned to do so
- Assess whether different investments are redundant or working at cross-purposes
- Where possible, consider ways to eliminate professional development that clearly does not, and cannot be made to, increase teaching effectiveness
- Examine what it would take to create and invest in a coordinated and efficient set of strategies for improving teachers’ measured effectiveness

Obviously, such an ambitious reform of professional development spending must be considered a long-term objective rather than an immediate goal. As illustrated in Figure 8, school systems adopting new teacher-evaluation systems can begin by taking some of the simpler steps described above.

FIGURE 8

A hierarchy of actions to leverage “improvin’ it” strategies



Source: Author

Conclusion

Some reformers worry that teachers will assume that new evaluations are only meant to fire ineffective teachers rather than help all teachers improve. Not surprisingly, then, reforms often seek to reassure teachers that such assumptions are incorrect. But simply reassuring teachers is not enough. If the challenge is framed merely as a tactical communications problem about securing “buy-in” from stakeholders, and leaders do not back up their rhetoric with policies that really can help all teachers improve, then teachers will only become all the more embittered later. If so, the short-term victory in obtaining teachers’ early support for evaluation reforms might, “now seeming sweet, convert to bitterest gall,” as Shakespeare wrote in an altogether different context in his tragedy *Romeo and Juliet*.

But the tragedy will be more than merely tactical. The current debate about how to increase teaching effectiveness represents an unprecedented opportunity to finally confront the long-known fact of wasteful spending on poorly designed, ineffective professional development in the United States. If reformers and education leaders can leverage that opportunity to design a broader set of policies that both “move it” *and* “improve it,” the ultimate increase in teaching effectiveness will be vastly greater. Many more teachers will benefit, and so will their students.

About the author

Craig D. Jerald is president of Break the Curve Consulting, which provides technical assistance and strategic advice to organizations working to improve education for all students. From July 2000 to July 2004, Craig was a principal partner at the Education Trust, where he worked extensively on issues related to teaching effectiveness, school accountability, federal education policy, and the practices of high-performing schools and districts. As a senior editor at *Education Week* from 1996 to 2000, Craig founded and managed the organization's research division and directed *Ed Week's* special annual reports projects, "Quality Counts" and "Technology Counts." Craig also has worked at the U.S. Department of Education, and he began his career as a middle school teacher of language arts, history, and mathematics in California's Long Beach Unified School District.

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Endnotes

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- 2 In this paper I assume that states and districts will continue to follow the current trend of adopting multiple measures for evaluating teaching effectiveness, including, at the very least, student-learning gains and standards-based observations of classroom practice. Ideally, those multiple measures will function as complementary measures that are correlated and have greater predictive power when combined. Systems that adopt dissonant rather than consonant measures of effectiveness risk sending conflicting signals to teachers that can severely undermine their efforts to improve. The phrase "increases in measured effectiveness" thus refers to quantitative gains on one or more complementary measures of teaching effectiveness adopted by a state or district.
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- 17 Hanushek, "Teacher Deselection," p. 175.
- 18 Matthew DiCarlo, "The 5-10 Percent Solution," The Shanker Blog, December 16, 2010, available at <http://shankerblog.org/?p=1473>.
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- 23 Quoted in Erik Robelen, "New Study Sees Little Benefit for Staff Development in Math" Education Week Curriculum Matters Blog, May 26, 2011 available at http://blogs.edweek.org/edweek/curriculum/2011/05/new_study_shows_little_benefit.html.
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