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Getting "Real" About Teaching Effectiveness and Teacher Retention

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Over the last decade or so, policy and business leaders have come to know what parents have always known: teachers make the greatest difference to student achievement. With new statistical and analytical methods used by a wide range of researchers, evidence has been mounting that teacher quality can account for a large share of variance in student test scores (Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2007; Ferguson, 1991; Hanushek, 1996; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004; Sanders & Rivers, 1996). However, while researchers agree about the primary role that teachers play in advancing student achievement (Darling-Hammond & Sykes, 2003; Murnane, 1985; Sanders & Rivers; Wayne & Youngs, 2003), they are often at odds over the best means to identify and retain the most effective teachers. Fueled by the popular press, teaching today seems to be viewed not as a complex profession that demands extensive preparation but as a job that can be done well by smart, highly motivated individuals with little need for training (Kristof, 2006).

For some, as the title of the well-known education journalist Jay Matthews' (2009) *Washington Post* article states, our nation's neediest public "schools need [youthful] energy more than experience" in its teaching ranks. For them, teacher retention does not seem to matter. As a result of this growing perception of late, many pundits as well as policymakers have turned to high-profiled programs, like Teach for America (TFA), who recruit bright young people who just graduated from competitive colleges, and with only a few weeks of preservice training (mostly in classroom management and test prep teaching strategies), teach for two years before they move on to more ambitious or lucrative careers (Rotherham, 2009). There is no doubt that the 4,000 novices TFA recruited to teaching in 2009 brought much-needed energy and enthusiasm to many of the nation's high-needs schools (Tulenko, Wald, Visconti, McKeown, & Devet, 2010); and they often fill jobs in some of the nation's most troubled inner-city and rural schools that would have been staffed by even lesser prepared individuals (e.g., long-term substitutes) than themselves.

Those who endorse short-cut alternative certification approaches to teaching often promote the belief that teachers are born, not made—and *the* key to school reform is attracting more of the so called right people into teaching and then judging them after they enter teaching on the basis of how well their students score on standardized tests (Wilcox & Finn, 1999). Traditional teacher education and certification, which usually includes some form of supervised student teaching, is not the answer to the teaching effectiveness problem. In fact, it is often seen as *the problem*. As blared by a March 2010 cover story of *Newsweek* magazine, the way to fix America's failing public schools

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is to eliminate schools of education and fire bad teachers. *Newsweek* reporters, without drawing on any evidence, claimed that education schools only offer "insipid or marginally relevant theorizing and pedagogy" and by looking at student achievement data, policymakers can easily and quickly "tell who is a good teacher and who is not" (Thomas & Wingert, 2010, para. 3). No doubt the vitriol over teachers and their profession has become intense.

In reality, the journalists (and the policy pundits who feed them) have it wrong. The bulk of the research evidence reveals that professional preparation actually does matter for student achievement, as does the retention of more experienced and credentialed teachers. In addition, teacher turnover is expensive, costly, and undermines long-term school improvement—especially in high-needs schools. Researchers have documented that teaching has a much higher turnover rate (16%) than other professions (11%) (Ingersoll, 2008), and that school districts must spend approximately $15,000 to $20,000 for each teacher who leaves (Alliance for Excellent Education, 2005). More than anything else, long term school improvement—especially in high-needs communities—requires a stable faculty who are well prepared and supported to serve both students and their families (Sarason, 1982).

In this issue of the *Journal of Curriculum and Instruction*, a set of papers drawing on a range of data offers more substantiation that teaching is a complex activity that takes time to learn. Those who enter through more comprehensive teacher education programs, rather than short-cut alternative ones, learn more deeply about their profession and are more likely to remain in teaching. Let me briefly offer a few highlights from this new research, and then couch it in a larger set of empirical evidence, with implications for policy and practice.

The New Studies

First, in their study, Bell et al. (2010) described how university-prepared special education recruits, compared to their alternative certification counterparts, were more likely to report that they were ready to teach. However, what seemed to matter more was the quality of mentoring they received once they got on the job. One interesting twist, uncovered by the researchers, was the differences in what both university—and alternatively-prepared recruits reported as to what their programs best prepared them to do. Universities seemed to do a better job in preparing new teachers for using data from standardized assessments, adapting instructional opportunities, and using different strategies in different learning environments. On the other hand, the alternative certification programs seemed to do a better job in preparing new teachers for communicating student achievement and progress to students and parents and dealing with classroom management. Neither seemed to be adept at readying new recruits in "structuring, directing, supporting, and providing feedback for the activities of paraeducators, volunteers, and tutors" (p. 42).

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Granted, the study confirmed what others have found. Alternative training regimes, which require less coursework and lower opportunity costs, are more likely to recruit diverse candidates to teaching. And while the researchers were not able to assemble actual measures of teacher effectiveness, the study does raise important questions about the costs and benefits of more and less traditional approaches to teacher recruitment as well as preparation and retention.

In her perspective paper, Gabriel (2010) makes the case that professional development, and by extension, teacher preparation should be differentiated in order to be responsive to the needs, interests, awareness, and commitment of individual teachers. Developing effective teachers and keeping them committed to the profession requires a more adaptive approach to teacher recruitment and education. An in-depth study of a small sample of new teachers (with experience ranging from one to three years) found differences in what the novices could do, and upon what they could focus. First year teachers were in a technical, information-gathering stage and honed in on developing tricks of the trade. As new teachers learned more about teaching, especially from their more seasoned colleagues, they began to analyze and reflect upon their practice, especially those pedagogical elements not readily detected in a drive-by classroom observation undertaken by principals or instructional coaches. It was at this point these second-year teachers became “interested in the theory behind the methods with which they were beginning to have experience” (p. 91). Third year teachers, in increasing their analytical skills, began to seek out opportunities to observe and critique the classroom skills of their colleagues and “developed clearer and broader understandings of the implications of their (pedagogical) work” (p. 92).

In their paper, Corbell, Booth, and Reiman (2010) also examined how committed traditionally and alternatively licensed recruits were to teaching—but in this case looked at math and science teachers and the factors that might explicate why they chose to remain in teaching. They found, like most other researchers, that traditionally prepared novices were more likely to stay. However, while alternative recruits’ commitment was best explained by classroom management skills, instructional resources and success with students were the factors that seemed to predict the commitment of traditional recruits**.** The lack of preservice training seems to make significant difference for the kinds of supports new recruits in math and science need in order to stay in teaching. In fact, traditional recruits seemed to be ready to work with students with learning disabilities, but this did not appear to be the case for their alternatively prepared counterparts. Alternatively licensed teachers, because of limited preservice training, focus mostly on tools to manage classrooms. Traditionally licensed teachers seek more instructional resources because they are more ready to teach. They already have the basics in how to manage student behavior. In any case, different pathways into teaching, with different opportunities to learn to teach, mean that policymakers and administrators need to differentiate induction programs for new recruits.

Drawing on research that reveals that effective teachers develop over more than a few years, Waddell (2010) examines the conditions that increase retention rates of

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novices in urban schools past the five-year mark. Positive relationships with colleagues and principals seem to matter most to long-term retention. The study, like others, suggests that professional learning communities as well as comprehensive mentoring and induction programs matter as well, but not as much as the support the educators provide to each other. Policymakers often avoid addressing teacher working conditions due to the perceived costs. But these findings suggest relatively inexpensive interventions (e.g., developing principals who embrace teacher leadership) can make a big difference in who stays and who leaves the classroom.

Finally, in her article, Darling-Hammond (2010) draws on a wide range of research to demonstrate clearly how salaries and working conditions, as well as preparation, mentoring and support, affect teacher entry and retention in the profession. She surfaces compelling evidence from large quantitative databases as well as the voices of teachers and best practices from several school districts (e.g., Chattanooga, TN and the Benwood Initiative). But most poignantly, she closes with powerful words that policymakers must heed if they are going to, as she suggests in her title, "[turn] around the race to the bottom in high-need schools."

> Good teachers gravitate to places where they know they will be appreciated. They are sustained by the other good teachers who become their colleagues, and together these teachers become a magnet for still others who are attracted to environments where they can learn from their colleagues and create success for their students. Effective leaders and policymakers create great school environments in which accomplished teaching can flourish and grow (p. 27).

What Do We Know about Retaining Effective Teachers?

Historically, school districts have never been very good at identifying effective teachers, primarily due to the poor training of administrators and the lack of time they have managing the evaluation process (Berry, in press). A recent report from the New Teacher Project reveals how only a small percentage of teachers are rated unsatisfactory, but also reports how teachers are often treated as "widgets," not professionals, in the evaluation process (Weisberg, Sexton, Mulhern, & Keeling, 2009). As a result there are few means to fully examine whether the most effective teachers leave teaching or not. Goldhaber, Gross, and Player (2007) found that teachers with stronger academic qualifications are more likely to leave teaching, but if they have gone on to earn their National Board Certification they are much less likely to do so. However, National Board Certified Teachers (NBCTs) are far less likely to teach in high-needs schools, where conditions often undermine effective teaching (Berry, 2009). And underlying these issues are the extent to which teachers are prepared to teach and how well they are supported on the job—both by their principals as well as their colleagues. Evidence that supports this claim is explored next.

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Preparation

A 2005 synthesis of teacher education research by a panel of the American Educational Research Association did not clearly point to the superiority of any particular program structure (e.g., four-year undergraduate program, fifth-year post-baccalaureate program, or alternative program; Cochran-Smith & Zeichner, 2005). However, the panel did indicate that, under the right conditions, certain strategies used in preparation programs, such as case studies and teaching portfolios, can yield positive outcomes for teachers and their students. However, a 2008 study by the National Bureau of Economic Research found that teachers with more extensive clinical training (including a full-year internship) before they begin to teach actually produce higher student achievement gains (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008). In a study of both traditional and alternative pathways into teaching, the researchers—using a large and sophisticated database—found that teacher education programs that produce higher student achievement gains and greater retention in their graduates' first year of teaching had the following characteristics: (a) extensive and well-supervised student teaching with strong congruence between the training experience and the first-year teaching assignment, (b) opportunities "to engage in the actual practices involved in teaching" (e.g., lesson studies with colleagues), (c) opportunities to study and assess local school curricula, and (d) a capstone experience in which action research or data-focused portfolios are used to make summative judgments about the quality of the teacher candidate (Boyd, Grossman et al., p. 26).

Granted, a number of studies suggest little differential effects of traditional and alternative approaches on teacher effectiveness and retention. But many of these studies are muddied by poor designs and variable specification (Cochran-Smith & Zeichner, 2005). For example, in one study, researchers compared young recruits from a well-known alternative certification program with traditionally prepared young teachers in the same high-need schools and found that the alternate-route teachers produced greater achievement gains for their students (Decker, Mayer, & Glazerman, 2004). Importantly, the gains were only in math, and not all that significant; reading gains were the same for both groups. More to the point, a close examination of the study revealed that the alternative certification recruits actually had more practice-based teacher preparation, mentoring, and pedagogical coursework than their traditionally certified peers (Berry, 2005). Other studies have shown that alternatively trained teachers who had very limited pedagogical coursework before they began to teach actually lowered their students' achievement scores over the course of the academic year (Corcoran & Jennings, 2009). These findings and other research suggest that pathways into teaching, alternative or traditional, do not matter as much for student achievement as *the quality of the training*, especially the quality of a trainee's student-teaching experience and how well the clinical preparation is tied to relevant pedagogical coursework (Humphrey & Wechsler, 2005, 2007). But preparation does matter, especially in terms of working with second language and other special need learners, as well as parents and families, and learning how to find and use resources to adapt instruction for diverse students (Berry, Daughtrey, & Wieder, 2010).

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Experience

Some researchers have not found that teaching experience beyond the initial three years results in improved student test scores (Murnane & Steele, 2007). However, not all teachers, even with the same number of years in the classroom, have the same teacher preparation and professional development experiences over time. Other researchers have shown that more experienced, expert teachers, compared to their more newly minted counterparts, organize the knowledge of content, teaching strategies, and students differently, retrieve it more readily and can apply it in novel and creative ways (Berliner, 1988; Shulman, 1987; Sternberg & Horvath, 1995). Still others have shown that more seasoned experts are more able to overcome some of the stressful working conditions found in many high-need schools (Garmston, 1998).

But teachers do not gain from their experience in a vacuum. Teaching experience may matter for student achievement when teachers have access to their more seasoned, expert colleagues. In addition, researchers have shown that the main reason American students do not perform as well as many of their international peers on achievement measures in math and science is that their teachers are not given the same kinds of opportunities to learn from one another (Stigler & Hiebert, 2009). In this investigation it was the collective experience of teachers that seemed to matter most for improving student achievement—an issue explored in more depth in the following section.

Collaboration

Rosenholtz's (1989) landmark study of two decades ago concluded that "learning-enriched schools" were characterized by "collective commitments to student learning in collaborative settings…where it is assumed improvement of teaching is a collective rather than individual enterprise, and that analysis, evaluation, and experimentation in concert with colleagues are conditions under which teachers improve" (p.73). Indeed, in a recent study using 11 years of matched teacher and student achievement data, researchers were able to isolate and quantify the added value generated by such collective expertise. They found that most value-added gains are attributable to teachers who are more experienced and better qualified, and who stay together as teams within their schools. Drawing on sophisticated analyses, the researchers found that peer learning among small groups of teachers seems to be the most powerful predictor of improved student achievement over time (Jackson & Bruegmann, 2009; see Table 1). *Education Week*, in reporting on this groundbreaking research, concluded: "[T]eachers raise their games when the quality of their colleagues improves" (Viadero, 2009, para. 1).

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Table 1
Development of Shared Expertise Leads to Significant Student Gains

	Reading Score Impacts (in standard deviations)	Math Score Impacts (in standard deviations)
As estimated value-added of teachers' peers increases, their students' achievement scores simultaneously increase.	+2.6%	+4.0%
Two years after collaborations end, teachers still post greater student achievement gains, suggesting lasting positive effects of collaboration and peer learning.	+7.2%	+7.8%

Note. Adapted from "Teaching students and teaching each other," by C. K. Jackson and E. Bruegmann, 2009, July, NBER Working Paper 15202. Cambridge, MA: NBER.

As part of the Center for Teaching Quality's investigations into working conditions, teacher retention, and student achievement, one science teacher with 10 years of experience shared:

> I remember those early stages of feeling so overwhelmed as a novice teacher. I was trying to prepare everything one day ahead of where the kids were. And then I went through a stage where I was a little bit more comfortable. I had plenty of content knowledge. That has never been a problem. The problem has been how to teach it. If it was not for the mentor who helped me, and now my professional learning community, I would not be as effective as I am. I would have to honestly say that it's just in the last couple of years that I really feel good about my teaching and the results I am getting. I think that it really takes five years, with support, to become an effective teacher (Berry, Daughtrey, & Wieder, 2009, p. 4).

In fact, a six-state survey of NBCTs found that factors such as strong principal leadership and a collegial staff with a shared teaching philosophy prove to be far more powerful determinants than salary in both recruiting and retaining these accomplished teachers for high-need schools (Humphrey, Koppich, & Hough, 2005; Koppich & Humphrey, 2006). Another recent study found that students achieve more in mathematics and reading when they attend schools characterized by higher levels of teacher collaboration for school improvement (Goddard & Goddard, 2007). In fact, raising the quality of teaching and boosting student achievement in high-need schools require an intensive focus on other working conditions as well: appropriate teaching assignments; adequate time to work with colleagues and students; professional development that focuses on systemic, sustained, and collective study of student work; access to information, materials and technology; and helpful feedback on teaching (Little, 1996).

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The role of collaboration in making teachers more satisfied with their positions and the profession is fairly well understood by researchers (Berry, Daughtrey, & Wieder, 2010; Bryk, Nagaoka, & Newmann, 2000; Ingersoll & Perda, 2009; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). And, recent polling data show that collaboration is also a major contributor to effective teaching and learning. Over 90 percent of the nation's teachers report that their colleagues contribute to their teaching effectiveness (see Figure 1). New teachers, in particular, were more likely to strongly agree that their success in the classroom hinged on the effectiveness of others, and it was more seasoned colleagues who helped them get better at teaching and want to remain in the profession (MetLife Foundation, 2009). Collaboration matters a great deal for teacher effectiveness and retention.

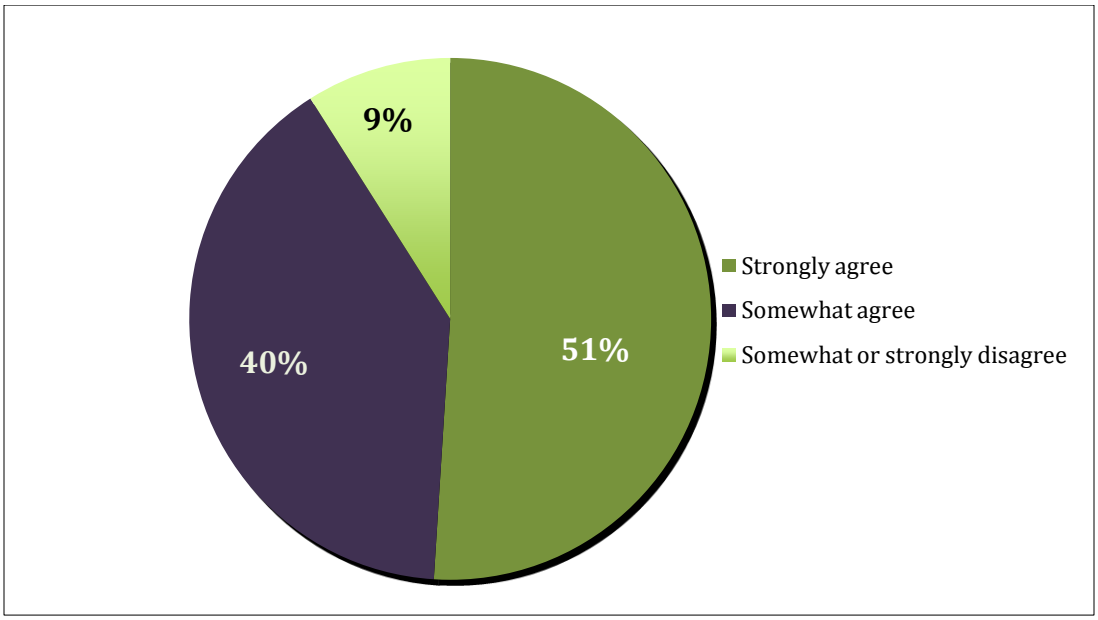

Figure 1. Teachers who agree that "other teachers contribute to my success in the classroom." Adapted from MetLife 2009 Survey of the American Teacher.

Implications

The evidence outlined in this journal is compelling, but unfortunately not well understood by policymakers, practitioners, and the public. All too often, today's debates over teaching effectiveness nose-dive into a scuffle over whether to use standardized tests to judge teachers and to focus primarily on firing bad teachers as a means to improve student outcomes. But the reality is that while teacher effectiveness needs to be determined in large part on what students learn, current tools (even the highly touted valued-added methodology) are far too unstable to be used as a sole metric (Sass, 2008).

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But here both policymakers and the pundits who generally inform them are missing the point. Teaching effectiveness is determined primarily by whom teachers teach with, and in turn, can determine how long they intend to remain in the classroom. It is not about the lack of compelling data that the evidence highlighted herein often does not see the policy "light of day." Too many policymakers and the pundits who generally inform them do not address the realities implied by what really matters for teacher effectiveness and retention. For some it would mean more investments in teacher education and more costly teachers as a result. For others it would mean more powerful teachers (and perhaps even their unions) who are less likely to adhere to top-down mandates.

More solid evidence, such as the important new studies published in this issue of the *Journal of Curriculum and Instruction*, is still needed. But more scholarly inquiry will be insufficient to drive a new framework thinking about and acting on the key issues related to teacher effectiveness and retention. It is time to translate hard data into compelling stories and begin a campaign to inform and inspire a new policy framework that could resonate with the public. Public opinion polls have revealed that most Americans want highly-prepared teachers for all children (Education Testing Services, 2002; Public Education Network, 2004; The Teaching Commission, 2005). In addition, in 2009, 70 percent of American adults reported that they would like to see a child of theirs "take up teaching in the public schools as a career"—up from 48 percent in 1980 (Bushaw & McNee, 2009, p. 15). Helping the public think differently is a precursor to getting them to push policymakers to act differently. Helping practitioners push the thinking of policymakers and the public must come first. Academics, who often do not get into the fray, may need to rethink their role if they care deeply enough about the profession that makes all others possible. There is much they can do differently to reframe the debate and action over teacher effectiveness and retention.

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