

This issue brief was made possible with the generous support of MetLife Foundation.

What Keeps Good Teachers in the Classroom? Understanding and Reducing Teacher Turnover

Teachers are crucial to the success of our students. Yet many of them are leaving their schools and the profession every year, particularly in poorer, lower-performing schools. Several studies have attempted to identify why teachers leave and how to stem their turnover, but few have identified the quality of teachers who are departing. As in any profession, not all attrition is bad, but whether bad or good, it has financial ramifications. This brief explores the costs associated with teachers leaving the profession and their schools, the characteristics of those likely to leave, and what can be done to prevent unnecessary and costly turnover.

The costs

Each fall students return to school prepared for the start of another academic year, only to find that far too many of their teachers have not returned to the classroom with them. An estimated 157,000 men and women leave the field of teaching every year. More than 232,000 others change schools, in great part because they are in pursuit of better working conditions often found in wealthier, higher-performing schools. Together, these movers and leavers make up an estimated 12 percent of the total teacher workforce. And these figures do not include the teachers who retire¹.

The exit of teachers from the profession and the movement of teachers away from low-performing schools are costly phenomena. Students lose the value of being taught by an experienced teacher, and schools and districts must recruit and train their replacements.

The costs of teacher attrition, or turnover, can vary widely by district and may include signing bonuses, subject matter stipends, and other recruiting costs specific to hard-to-staff schools. The National Commission on Teaching and America's Future (NCTAF) recently analyzed the different costs associated with teacher attrition—both for the school and for the district's central office. It estimates that individual urban schools spend \$70,000 a year on costs associated with teacher transfers—whether they leave the district or not. Nonurban schools spend \$33,000 each. In addition to these school-level costs, an urban district central office is estimated to spend another \$8,750 for every teacher that leaves the district entirely while nonurban districts spend \$6,250. By combining these school- and district-level costs, NCTAF places the cumulative costs for all schools and districts across the country—to hire, recruit, and train the replacement teachers—at a staggering \$7.34 billion (Barnes, Crowe and Schaefer 2007). Another study found that, in addition to the expenses incurred as a result of the recruitment and hiring processes, even more costs are associated with lost productivity and human capital (Milanowski and Odden 2007).

¹ Using national data from the National Center for Education Statistics that was analyzed by Dr. Richard Ingersoll, 231, 621 teachers are estimated to be movers and 156,552 are estimated to be leavers (excluding retirees).

These dollar amounts, large as they are, do not include any calculation of the price that students pay when qualified teachers leave, or of the negative effect on academic achievement. Teacher quality is crucial to student academic achievement (Ferguson and Ladd 1996; Haycock 1998; Rivkin, Hanushek, and Kain 2002; Rice 2003)—especially for students who need good teachers the most. There is general consensus that the single most important factor in improving any student’s performance is the quality of the teacher, but researchers have found that the impact of a higher-quality teacher is particularly significant for low-performing, minority students (Clotfelter, Ladd and Vigdor 2007). A study of Chicago public high schools finds that a higher-quality teacher had the greatest impact, measured by the increase in students’ test scores, among African American ninth-grade students (Aaronson, Barrow and Sander 2007). Another study, also focused on high schools, finds that having a highly qualified teacher may even compensate for racial and socioeconomic disadvantages (Clotfelter, Ladd and Vigdor 2007). These findings make it clear that recruiting and developing high-quality teachers—and then *retaining* them in every community and at every grade level—is critical to providing an equitable education to children across the nation.

Why do teachers leave?

Because many of today’s teachers were hired in the 1960s and 1970s and are now approaching retirement, it has been incorrectly assumed that retirement is the primary reason for the current teacher turnover (NCTAF 2003). But teacher turnover in individual schools includes both teachers who transfer from one school to another within a district (movers) and those who leave the district or the profession entirely (leavers). Retirement accounts for about a third of the public school teachers who are leavers (31.4 percent), but when examined in the context of total turnover that public schools experience, retirees are responsible for only 16 percent of the attrition.²

Working conditions play a much larger role than retirement in explaining why teachers transfer to different schools and districts or leave the profession entirely. In an analysis of teacher turnover, teachers reported retirement as a reason for leaving less often than job dissatisfaction or the pursuit of another job (Ingersoll 2003). Among public school teachers who transferred from one school to another, moving to get a better teaching assignment was cited as a deciding factor 38.1 percent of the time. Similarly, dissatisfaction with workplace conditions (32.7 percent) and dissatisfaction with the support received from administrators at their previous school (37.2 percent) were equally cited as other important reasons in their decision to move (NCESa 2007).

A recent MetLife Survey of the American Teacher also finds a clear correlation between quality school relationships and an increased rate of retention among teachers. Teachers stating that they were likely to leave the profession were also more likely to express dissatisfaction with their relationships with parents, the principal, and their students (MetLife 2005). Another study, by the Center for Teaching Quality, looked specifically at high schools and finds a similar correlation between better-quality working conditions and decreased teacher turnover. Student achievement also improves with better working conditions (Center for Teaching Quality 2007).

² Using data from the Teacher Follow-up Survey 2004–05 (NCES), the Alliance for Excellent Education finds that of the 269,600 public school leavers, 31.4 percent (or 84,654) are retirees. Out of the total movers and leavers in the public sector, retirees make up 16 percent of the turnover [(retirees)/(movers + leavers)].



Which teachers leave?

As in any profession, not all turnover is bad, especially if it facilitates the exit of lower-quality teachers. Common wisdom has held that higher-quality teachers leave at greater rates, but recent research has called that into question.

Generally speaking, teachers in any phase of their careers who have high *academic* credentials (such as being a graduate from a highly selective college or having high undergraduate grade point averages) are most likely to leave the teaching profession for reasons other than retirement. Those with strong *education* credentials (such as certification and an undergraduate degree in education), on the other hand, are more likely to move between schools, but most likely to stay in the profession (DeAngelis and Presley 2007; Goldhaber, Gross and Player 2007; NCESb 2007).

New teachers with strong academic qualifications are more likely to move to districts with what are typically considered more attractive schools or to leave the profession altogether (DeAngelis and Presley 2007). The selectivity of a teacher's undergraduate institution (as measured by average SAT scores) has also been found to be associated with the likelihood of exiting the profession. For women, in particular, the chance of this outcome increases by 29 percent as SAT scores increase by one hundred points (Goldhaber, Gross and Player 2007). Teachers with higher academic qualifications are especially likely to leave a school whose students are not performing well academically. For example, teachers who scored higher on the General Knowledge portion of the certification exam were more likely to leave a school where students did not perform as well on the standardized English Language Arts test. In contrast, teachers who scored in the lowest quartile actually showed increased retention. These findings explain why it may be difficult for low-performing schools to attract and retain better-qualified teachers (Boyd et al. 2005).

On the other hand, those who have invested in credentials specific to teaching are most likely to stay. For example, women who obtained their National Board certification are 90 percent less likely to leave the school system and 18 percent less inclined to transfer within the district (Goldhaber, Gross and Player 2007). Among teachers who had majored in education and who did leave, the most-cited reason for leaving was “family-related” (32.1 percent), rather than related to work conditions or preferences. In contrast, science, math, and engineering majors who left teaching are most likely to leave for a job outside of education (44.5 percent) (NCESa 2007).

Unsurprisingly, these findings show that those who have invested in their careers as educators are bound to stay in the field longer. But are the teachers who are staying the “best” at improving student achievement? Some researchers have found weak correlations between student performance and any *one* particular credential—academic or educational (Aaronson, Barrow and Sander 2007; Goldhaber, Gross and Player 2007). On the other hand, a plethora of research supports that some of these factors—perhaps in combination—do contribute positively to producing an effective teacher (Rice 2003; Clotfelter, Ladd and Vigdor 2007). Hence, credentials alone do not clarify whether the “best” teachers are leaving the profession or moving away from disadvantaged schools.



Are schools losing their best teachers?

For this reason, researchers have undertaken the task of measuring the quality of the teachers leaving the classroom by developing other variables to answer this crucial question, such as examining the degree of change in student performance a particular teacher can create after a year a student spends in his or her classroom.

The good news is that these studies find that the lowest-quality teachers, as measured by this standard, tend to have higher rates of turnover and the more effective teachers tend to stay. One study finds that teachers ranked at the bottom in terms of effectiveness turn over more than any other group. For example, a teacher ranked in the bottom 10 percent of a quality distribution is 13 percent less likely to remain in teaching in the same district the following year than teachers who rank higher (Aaronson, Barrow and Sander 2007).

Another study finds that, on average, teachers who have been shown to increase their students' academic performance stay in the teaching profession longer and are not necessarily more apt to leave lower-performing, poorer schools. Although challenging environments generally increase the likelihood of teacher attrition, those teachers who are deemed more effective are also more likely to stay in these lower-performing schools (Goldhaber, Gross and Player 2007).

The bad news is that these findings do not hold true for the *most-challenging* schools. Although effective teachers generally tend to stay in challenging schools, as teachers become more effective, they are more likely to move away from the most-challenging schools to schools with relatively lower concentrations of poverty and higher performance levels (Goldhaber, Gross and Player 2007). Teachers who work in poor schools, as determined by the proportion of students receiving free and reduced-price lunch, are significantly more likely to leave their school or profession than those who work in wealthier ones. Those teachers who work in high poverty schools have an annual turnover rate of 20 percent, while those in low poverty schools have a rate of 12.9 percent (NCTAF 2003). Moreover, a MetLife survey finds that teachers "at-risk" of leaving the profession are also more likely to be teaching in urban, low-income schools with high concentrations of minority students (MetLife 2005). Low funding levels in high-poverty districts generally do not allow schools to offer competitive wages and often contribute to ineffective, bureaucratic recruitment and hiring procedures; challenging work conditions; and inadequate teacher supports (Levin and Quinn 2003).

The lower turnover rates of effective teachers among challenging schools is encouraging. But students being served by the most-disadvantaged schools should not be neglected; neither should the teachers who have the desire and knowledge to contribute to students' academic achievement, but lack the tools necessary to do so. Instead, systems should be designed to ensure that the best teachers are teaching the students with the highest challenges and that teachers receive the training and support they need to help students succeed.



Success is key to retaining teachers

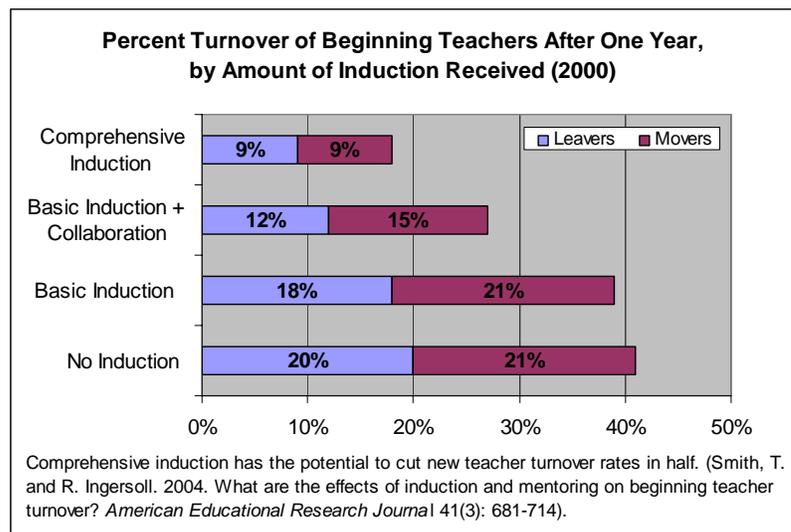
Certainly, a teacher’s decision to stay or leave a particular school is contingent on a variety of factors—ranging from teachers’ personal characteristics to their satisfaction with the school’s environment. However, in all cases, the *key seems to lie in the level of success teachers encounter in raising their students’ academic performances.*

For this reason, giving teachers the supports necessary to succeed is critical. Policy changes and systemwide improvement efforts should focus on making such success possible. New teachers, in particular, are at risk of leaving the profession within their first year of teaching if they are unprepared and unsupported to teach in challenging situations. It is estimated that within the span of five years—the average time it takes for teachers to maximize their students’ learning—half of all new teachers will have exited the profession (Ingersoll 2003). Beginning teachers are routinely assigned the most difficult classrooms, full of low-performing students at risk of falling behind or of dropping out. A study of new teachers in Massachusetts finds that one in five received no operational curriculum at all—meaning teachers were on their own to decide what to teach and how to teach it—and over half encountered a curriculum that specified topics or skills to be taught but that provided no materials or guidance on how to address them (Kauffman et al. 2002). Without experience and often lacking complete curricula, these teachers are usually the least prepared to turn at-risk students around.

Comprehensive induction: Giving teachers the opportunity for success

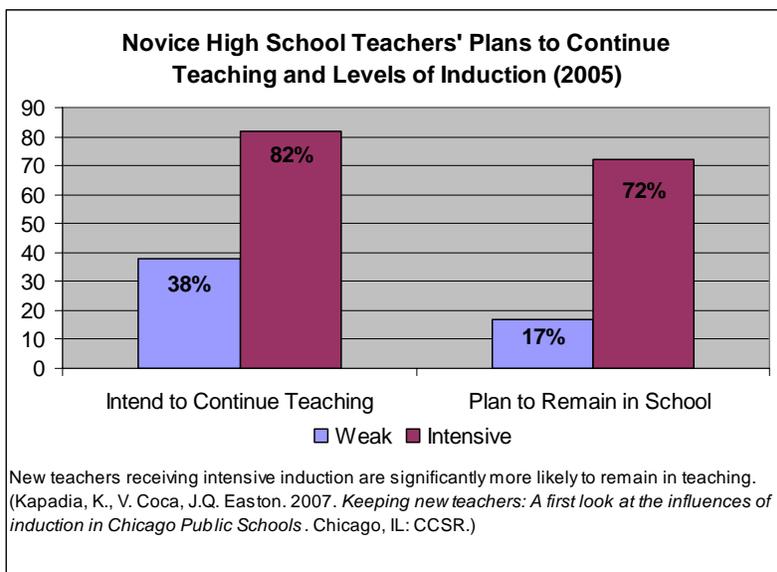
How can the nation ensure that its new teachers, especially those in struggling schools, stay in the classroom long enough to make a difference for their students?

Comprehensive induction, a program that includes varying degrees of training, support, and assessment during a teacher’s first years on the job, proves most effective. Comprehensive induction combines high-quality mentoring with release time for both new teachers and mentor teachers to allow them time to usefully engage with one another; targeted and ongoing quality professional development; common planning time with other teachers in the school; and networking with teachers outside the school during at least the new teacher’s first two years in the profession. The induction process culminates with an evaluation to identify a teacher’s strengths and weaknesses, target future professional development, and determine if the individual should move forward in the profession (Alliance for Excellent Education 2004). The National Educational Association and the American



Federation of Teachers support induction programs and the use of standards-based reviews as an essential element of an effective induction program (American Federation of Teachers 2001; National Education Agency 2003).

In 2000, less than 1 percent of beginning teachers received comprehensive induction, but those who did saw just over a 50 percent reduced likelihood of turnover (Smith and Ingersoll 2004)³. Similarly, other studies find that districts that invest in induction experience less yearly teacher turnover and increased teacher retention in the long run (Shockley, Guglielmino and Watlington



2006). These findings are particularly important, as they affect new high school teachers, who typically receive less intensive induction than elementary school teachers (Ingersoll 2007; Kapadia, Coca and Easton 2007). New high school teachers who do receive intensive levels of induction are significantly more likely than those who receive weak levels of induction to say they intend to continue teaching and plan to remain in their current schools (Kapadia, Coca and Easton 2007).

A case for induction

In addition to increasing teacher retention, induction programs teach effective instructional practices that improve student learning (Serpell and Bozeman 2000). The combination of professional development and exposure to their mentors' and other teachers' experiences can shorten the time it takes for new teachers to perform at the same level as an experienced teacher, which is, on average, from three to seven years without induction. The New Teacher Center, a national resource center on teacher induction, finds that the productivity of new teachers in comprehensive induction programs rivaled that of their third- and fourth-year peers (Villar and Strong 2007). Thus, an inducted first-year teacher is likely to produce the same levels of student achievement as a noninducted fourth-year teacher. Although comprehensive induction programs are not inexpensive, they have short- and longer-term payoffs. Since these first-year and fourth-year teachers are essentially doing the same job, the gap between first- and fourth-year salaries represents savings from the programs in addition to the savings related to reducing turnover.

³ Comprehensive induction is defined here as having four components: (1) Basic induction (mentor and supportive communication with principal or other administration) and collaboration (common planning time and regular scheduled interaction with other teachers); (2) participation in an external network of teachers; (3) having reduced number of preparations; and (4) being assigned a teacher's aide. (Smith and Ingersoll 2004).



In the 2004–05 MetLife Survey of the American Teacher, new teachers reported being greatly stressed by administrative duties, classroom management, and testing responsibilities, as well as by a lack of relationships with their students’ parents (MetLife 2005). Comprehensive induction programs are designed to address the roots of teacher dissatisfaction by providing teachers with the supports and tools they need for success—by guiding their work, further developing their skills to handle the full range of their responsibilities, and evaluating their performance during the first few years of teaching.

Induction also improves the satisfaction and skills of *veteran* teachers. Experienced teachers serving as mentors or evaluators improve their own teaching practices by observing and coaching beginners. Often teacher coaches find that mentoring provides them new opportunities for career growth and better pay. The collaborative aspect of a good induction program helps foster a community of educators committed to raising the performance of their school and district. The benefits of induction to all teachers, new and seasoned alike, should not be underestimated.

Financially, comprehensive induction has shown to more than pay for itself (Fletcher and Villar 2005). The New Teacher Center estimates a \$1.66 rate of return on every dollar invested in an induction program (Villar and Strong 2007). Yet across the nation, states routinely spend millions of dollars each year to replace teachers who leave the classroom instead of investing in induction programs. Federal law, under the No Child Left Behind Act, allots Title II funding toward improving teacher quality that can be used toward designing and implementing a successful induction program. Unfortunately, induction is not required or prioritized for these funds, and little is known about what percentage is spent on induction programs.

Tapping teachers’ potential

Completely eliminating turnover is not ideal, of course, as ineffective teachers do need to leave the profession. However, too many effective, new, and academically strong teachers who have the potential to positively influence the nation’s students leave or move away from disadvantaged classrooms every year because supports are not available to them. High-quality, comprehensive induction, although not a panacea on its own, can give the latter group the tools necessary to succeed in challenging classrooms and help new teachers become effective in a shorter amount of time. Simultaneously, it further develops the skills of veteran teachers. And when combined with improved working conditions, comprehensive induction provides an environment of success for teachers—an environment that is crucial to equalizing the quality of education for all students. When teachers are not supported, the loss—to taxpayers, educators, schools, communities, and students—is immense.

MetLife Foundation

The Alliance for Excellent Education is grateful to MetLife Foundation for its generous financial support for the development of this brief. The findings and conclusions presented are those of the Alliance and do not necessarily represent the views of the funder.



References

- Alliance for Excellent Education. 2004. *Tapping the potential: Retaining and developing high-quality new teachers*. Washington, DC: Author.
- American Federation of Teachers. 2001. *Beginning teacher induction: The essential bridge*. Washington, DC: American Federation of Teachers.
- Aronson, D. L. Barrow, and W. Sander. 2007. Teachers and student achievement in Chicago public schools. *Journal of Labor Economics* 25 (1): 95–135.
- Barnes, G., E. Crowe, and B. Schaefer. 2007. *The cost of teacher turnover in five school districts*. Washington, DC: National Commission on Teaching and America's Future.
- Boyd, D., S. Loeb, H. Lankford, and J. Wyckoff. 2005. *Explaining the short careers of high achieving teachers in schools with low performing students*. Albany, NY: Teacher Policy Research.
- Center for Public Education. 2005. Findings from Research. "Teacher quality and student achievement research review". www.centerforpubliceducation.org (accessed January 22, 2008).
- Center for Teaching Quality. 2007. "Teaching and learning conditions improve high school reform efforts". Chapel Hill, NC: Author.
- Clotfelter, C. T., H. F. Ladd, and J. L. Vigdor. 2007. Teacher credentials and student achievement in high school: A cross-subject analysis with student fixed effects. Working Paper 13617, National Bureau of Economic Research.
- DeAngelis, K. J. and J. B. Presley. 2007. "Leaving schools or leaving the profession: Setting Illinois' record straight on teacher attrition (IERC 2007-1)". Edwardsville, IL: Illinois Education Research Council.
- Ferguson, R. and H. Ladd. 1996. Additional evidence on how and why money matters: A production function analysis of Alabama schools. In Helen F. Ladd (Ed.), *Holding schools accountable: Performance-based reform in education*. Washington, DC: The Brookings Institution.
- Fletcher, S. and A. Villar. 2005. Research on student achievement and the benefit-cost analysis of new teacher induction. New Teacher Center at University of Santa Cruz, Seventh National Symposium—"Discover the Power of Teacher Induction," Fairmont Hotel, January 31, San Jose, CA.
- Goldhaber, D., B. Gross and D. Player. 2007. Are public schools really losing their "best"?: Assessing the career transitions of teachers and their implication for the quality of the teacher workforce. Working Paper 12, Center for Analysis of Longitudinal Data in Education Research, Urban Institute.
- Haycock, K. 1998. *Good teaching matters...a lot*. Washington, DC: Education Trust.
- Ingersoll, R. 2003. *Is there really a teacher shortage?* Seattle, WA: Center for the Study of Teaching and Policy.
- . 2007. Quality programs for new teacher support. Paper presented at the 2007 Annual Meeting of the American Educational Research Association.
- Kapadia, K., V. Coca and J. Q. Easton. 2007. *Keeping new teachers: A first look at the influences of induction in the Chicago Public Schools*. Chicago, IL: Consortium on Chicago School Research, University of Chicago.
- Kauffman, D., S. M. Johnson, S. M. Kardos, E. Liu, and H. G. Peske. 2002. "Lost at sea": New teachers' experiences with curriculum and assessment. *Teachers College Record* 104 (3): 273–300.
- Levin, J. and M. Quinn. 2003. *Missed opportunities: How we keep high-quality teachers out of urban classrooms*. New York: New Teacher Project.



- Milanowski, A. T. and A. R. Odden. 2007. A new approach to the cost of teacher turnover. Working Paper 13, Daniel J. Evans School of Public Affairs, University of Washington.
- MetLife Survey of the American Teacher. 2005. *Transitions and the role of supportive relationships: A survey of teachers, principals and students 2004-05*. New York, NY: MetLife.
- National Commission on Teaching and America's Future. 2003. *No dream denied: A pledge to America's children*. Washington, DC: Author.
- National Education Association. 2003. *Meeting the challenges of recruitment and retention: A guidebook on promising strategies to recruit and retain qualified and diverse teachers*. Washington, DC: Author.
- Rice, J. K. 2003. *Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.
- Rivkin, S. G., E. A. Hanushek, and J. F. Kain. 2005. Teachers, schools and academic achievement. *Econometrica* 73 (2): 417–458.
- Serpell, Z. and L. Bozeman. 2000. *Beginning teacher induction: A report on beginning teacher effectiveness and retention*. Washington, DC: American Association of Colleges for Teacher Education.
- Shockley, R., P. Guglielmino, and E. Watlington. 2006. The costs of teacher attrition. Paper presented the International Congress for School Effectiveness and Improvement, Fort Lauderdale, Florida.
- Smith, T. and R. Ingersoll. 2004. What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal* 41(3): 681–714 .
- U.S. Department of Education (a) National Center for Education Statistics. 2007. *Teacher follow-up survey* ("Questionnaire for Current Teachers" and "Questionnaire for Former Teachers"), 2004-05. Washington, DC: Government Printing Office.
- U.S. Department of Education (b). National Center for Education Statistics. 2007. *To teach or not to teach? Teaching experience and preparation among 1992-1993 bachelor's degree recipients 10 year after college* (NCES 2007-163). Washington, DC: Government Printing Office.
- Villar, A. and M. Strong. 2007. *Is mentoring worth the money? A benefit-cost analysis and five-year rate of return of a comprehensive mentoring program for beginning teachers*. Santa Cruz, CA: The New Teacher Center.

