

## Addressing Teacher Turnover

### Highlights

#### The Ultimate Goal

Attract and keep effective teachers in order to maximize student achievement.

#### The Problems

Replacing teachers is expensive. High exit rates from teaching contribute to teacher shortages, particularly in hard-to-staff areas. High turnover creates instability and harms student achievement, particularly for disadvantaged students.

#### Symptoms of Problems

Teacher shortages, reliance on out-of-field teachers to staff hard-to-fill jobs, unequal distribution of teachers within and between districts with newest teachers in most challenging schools.

#### Popular Responses

Provide bonuses for new recruits and stipends for teaching in hard-to-staff areas. Allow experienced teachers to move as they like within a district without sufficient consideration of individual schools' needs. Implement alternative certification programs to increase teacher supply.

#### Possible Unintended Consequences

When educators attribute staffing problems primarily to teacher shortages, schools risk failing to recognize and correct internal problems that can affect teacher turnover and student achievement.

#### Keep Thinking

Teachers don't work in a vacuum. They need to find schools that are a good match, so hiring based on both a school's needs and a teacher's interests and skills should improve satisfaction of both parties. A stimulating and supportive work environment can be at least as effective at retaining teachers as higher pay.



## Key Issues and Findings from the Research

Strong teachers are essential for bringing out the best in students which makes the retention of good teachers a top priority for schools. A recent report by the National Center for Education Statistics (NCES) found that 8 percent of the country's public school teachers left the profession in 2008-09 – three-fourths for reasons other than retirement – and another 8 percent switched schools.<sup>1</sup> That turnover of a half million teachers a year is expensive when schools have to recruit and train replacements. It also creates instability for students and the teachers who remain as they accommodate the newcomers' learning curves. While the percentage of teachers switching schools has remained fairly stable over the last two decades, the percentage quitting the profession has risen steadily.<sup>1</sup>

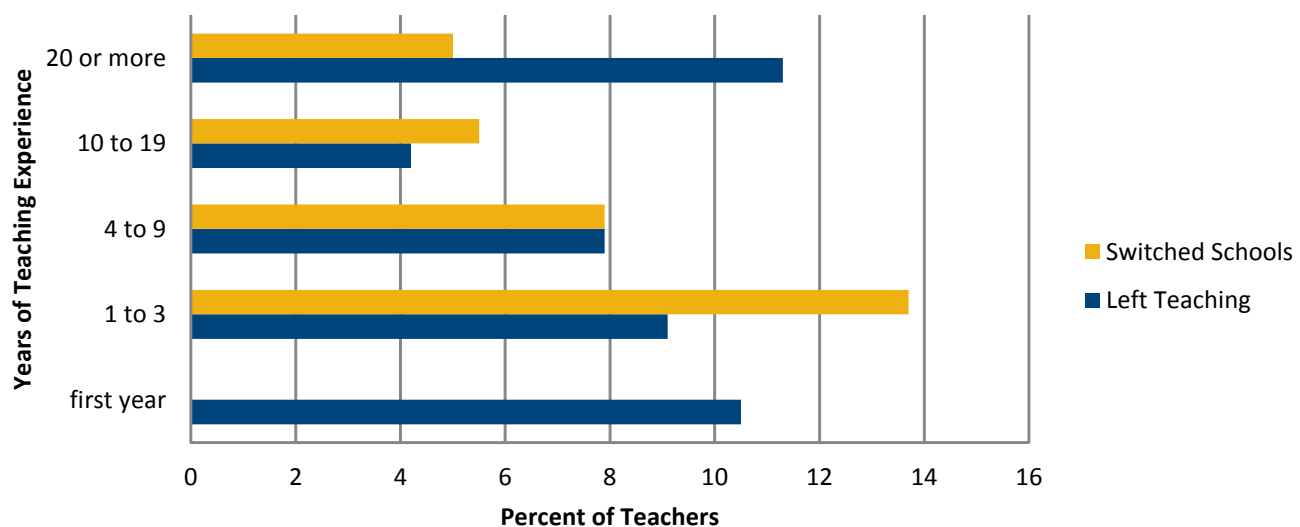
Moderate levels of turnover are not necessarily bad. Eight percent of public school teachers who switched schools or quit the profession in 2008-09 said it was because their contracts weren't renewed.<sup>1</sup> Any of those departures that sent ineffective teachers packing created opportunities for schools to hire replacements with fresh ideas and superior skills. But continuing high turnover can create a culture of churn that hampers academic planning and execution, disrupts ties between teachers and families, and can be indicative of underlying dysfunctions in the school.<sup>2</sup> Schools faced

with high turnover may find it hard to build a trusting, collaborative work environment and often have to bear the expense of repeated training and professional development for each wave of newcomers.<sup>3</sup> The accumulation of such effects can be particularly harmful for disadvantaged and low-achieving students.

Policy issues related to teacher retention fall into the broad categories of supply and satisfaction: ensuring that the personnel pipeline is adequate to keep up with demand and providing working conditions that will keep teachers happy enough to remain in the profession. The first category deals largely with the capacity of teacher preparation programs to staff all schools and disciplines. The second seeks to disentangle the reasons teachers leave and determine which interventions most effectively reduce attrition. Both touch on recruitment practices and financial factors such as salaries and bonuses. This document focuses mostly on the second category, leaving the first category for a future brief.

Teachers presumably decide to stay when their current job seems more attractive than competing alternatives. These alternatives can include moving to a different public school, shifting to a private or charter school, or switching to a different profession altogether, an option particularly open to math and science teachers. A trend in recent research has been to understand how turnover is influenced by the interplay of a teacher's characteristics, a school's organizational conditions, and student characteristics such as demographics and

Figure 1. Turnover by Years of Experience



Source: NCES  
Note: Data were not available for first year teachers who switched schools.

achievement levels.<sup>4</sup> Several studies have parsed out the characteristics of teachers most likely to switch schools or quit the profession, with some seeking to understand whether the highest or lowest quality teachers leave and what schools can do to retain their best teachers.

### Costs and Benefits

As with any policy or program it is useful to design a framework for computing the costs and benefits of implementation. Calculating the cost of teacher turnover is difficult, in part because some costs are not directly financial, such as the effect a new teacher's learning curve has on student achievement. A recent study used data from four districts in urban, suburban, and rural settings to identify categories of expenses and calculate the total cost of losing teachers.<sup>5</sup> The categories ranged from direct costs, such as recruitment, advertising, and hiring incentives, to derived costs for the share of training devoted to new teachers and share of administrative time spent replacing teachers. This latter piece included such tasks as closing out records for departing teachers, processing applications for job candidates, and placing new hires in schools. The estimated costs for each teacher who left the district ranged from just over \$4,000 in a small rural district in New Mexico to nearly \$10,000 in a suburban North Carolina district to nearly \$18,000 in the largest district, Chicago Public Schools. Multiplied by the number of teachers who quit each year, the total cost can become quite substantial.

Efforts to retain teachers also can be costly and should be compared with the costs of losing teachers. Several states offer financial incentives to attract and retain talented teachers or persuade them to work in schools with low-income or low-performing students. A typical example is a Washington state program that pays bonuses of \$5,000 a year to teachers certified by the National Board for Professional Teaching Standards (NBPTS) and an additional \$5,000 annually for working in a low-income school. A recent research report by the Center on Reinventing Public Education found that the cost of the bonuses has skyrocketed as more teachers have earned board certification, rising from less than \$10 million in 2007–08, to an estimated \$35 million in 2010–11 and a projected \$55 million in 2012–13. Increases of that magnitude invite scrutiny of the program's effectiveness, especially when states face budget shortfalls. Due to these rising costs, the

report found little net gain: only about 1 percent of board certified teachers had moved to challenging schools each year since a 2007 law authorized the \$10,000 total bonus, while almost as many eligible teachers had moved out of low-income schools in favor of ones with more affluent students. And while 94 percent of board certified teachers had remained at challenging schools since the bonus program began, that was only slightly higher than the overall retention rate for all teachers working in low-income schools statewide. This led the authors to question whether the bonuses were even necessary.<sup>6</sup>

But costs and benefits are tied to specific circumstances of programs and schools that use them. Studies in other settings have found that certain kinds of bonuses are cost-effective tools for keeping teachers in disadvantaged schools. For example, one team of researchers wrote that turnover dropped by 17 percent, on average, for certified math, science, and special education teachers in North Carolina who were paid annual bonuses of up to \$1,800 for continuing to work in secondary schools with concentrations of low-income or low-achieving students.<sup>7</sup> The program was most effective with experienced teachers, who the authors assumed may be more likely to raise test scores than new teachers.

### Young Teachers

Age and years of experience often emerge as drivers of teacher departure, with new teachers and teachers nearing retirement age among the most likely to leave (see Figure 1).<sup>2, 8</sup> Variation in the probability of leaving is due partly to changes in the competing demands of work and family as teachers age. An important part, however, is also due to instability at the beginning of a career created by district placement policies.<sup>4, 8, 9</sup>

Young teachers are typically placed in positions with a high proportion of disadvantaged students and/or in an undesirable location (with no adjustment in pay to offset these factors), often with little formal mentoring or support. If young teachers stay in the profession after this first experience, they gain seniority and move to a school with more optimal conditions.<sup>8</sup> Those teachers who don't survive the experience exit teaching altogether. Indeed, NCES reports that nearly 11 percent of new teachers and 9 percent with 1-3 years' experience quit teaching in 2008–09.<sup>1</sup>

High turnover among new teachers should be a mat-

ter of public concern because new teachers improve markedly during their first three years, and many leave before reaching their full potential. Even more important, the constant influx of new teachers in disadvantaged schools can be devastating for children, leading them to fall grade levels behind comparable peers in more advantaged schools. Maintaining high-quality young teachers in the profession generates a win-win for everyone: teachers work in their profession of choice; schools avoid a shortage of teachers; and students aren't guinea pigs for new teachers year after year.

The most worrisome type of teacher mobility occurs when highly effective teachers depart the profession. These moves aren't completely surprising because the skills that make a teacher successful in the classroom are likely to be valuable in other professions with higher pay. Some research suggests that this kind of mobility does indeed occur,<sup>10, 11</sup> but historically it has been hard to determine a teacher's quality from the available data because traditional measures like years of education are not strongly associated with student performance.

There are also reasons to expect the worst teachers to depart the profession. Unsuccessful teachers, by and large, know they are unsuccessful, and teaching provides them with little joy or personal reward. When an opportunity to do something different arises, they take it. There is recent evidence, using student test score growth as the measure of teacher quality, that teachers who leave urban schools tend to be among the weakest.<sup>12</sup>

While the question of whether teacher turnover is systematically dominated by high- or low-performing teachers is still up for debate, some schools certainly have undesirably high rates of turnover. A school's location and the makeup of its students all influence teacher mobility. Studies have found that beginning teachers are more likely to leave schools with high percentages of low-income or low-achieving students than schools with more advantaged populations, and some have found that turnover is higher in large urban settings than in suburban areas.<sup>10, 14</sup> One explanation is that many teachers choose to work near home or in schools similar to ones they attended.<sup>10</sup> Another is that working with disadvantaged students is more challenging, especially for inexperienced teachers.

One study that found higher turnover in schools of low-income and low-achieving students also found a strong link with poor working conditions, including bigger classes, deteriorating facilities, and textbook shortages.<sup>14</sup> Additionally, a study in Texas schools found that while low student achievement raised the likelihood of teacher turnover, race also had an effect, with higher enrollments of black and Hispanic students increasing the likelihood that white teachers would leave. Black and Hispanic teachers were less likely to leave as minority enrollments increased, however. This study also estimated salary differentials that might create enough incentive to offset large enrollments of disadvantaged students.<sup>15</sup> Pay is one of the more common reasons teachers give for leaving the profession and some studies have found that higher salaries can reduce turnover, particularly at the early and late years of teachers' careers.<sup>1, 4, 9</sup> Other studies find, however, that working conditions are more important than pay for many teachers.

### **Sense of Community and Support**

Understanding which characteristics of schools are most associated with high turnover can help district and school administrators plan more effective retention responses – especially when studies examine the relationships between certain characteristics of teachers and schools. Factors found to affect turnover include salary, class size, whether teachers participate in decision-making, school climate, and the presence of an effective induction or mentoring program.<sup>2, 4, 13, 16, 17</sup>

An important school characteristic is the presence of a professional community of teachers. One influential study on the causes of turnover found that perceptions of autonomy and inclusion in decision-making were associated with lower turnover. Teachers who quit were most likely to cite job dissatisfaction and a sense of limited opportunity, often because of inadequate administrative support, and problem students.<sup>2</sup> Some researchers have concluded that principals play an essential role in providing support and promoting a positive learning community.<sup>2, 17, 18, 19</sup> Examples include recognition of good work, instructional guidance, fair evaluations, clear communication of expectations, and consistent enforcement of rules.<sup>17</sup> Such findings are consistent with effective schools theory, which considers principals crucial for establishing collegiality and a strong learning climate. One tenet of this theory is that principals can attract and retain talented teachers

## Reasons Public School Teachers Left the Profession

<i>Personal life factors</i>	42.9%
<i>Other career factors</i>	14.8%
<i>School factors</i>	9.8%
<i>Contract not renewed</i>	5.3%
<i>Salary and benefits</i>	4.0%
<i>Student performance</i>	3.5%
<i>Other</i>	17.1%

Source: NCES

by forging a “unitary mission” focused on academics and hiring teachers with similar goals. They can then create conditions in the school that allow teachers to excel, such as including faculty in instructional decisions.<sup>20</sup>

The nurturing cocoon apparently can be spun too tightly, however. One researcher who has studied attrition extensively found the highest rates of teacher turnover in small private schools, particularly ones with a religious orientation – factors that could engender a unified mission and expectations of conformity. The author hypothesized that teachers who don’t agree with all parts of a mission might feel constrained in schools tightly focused on a purpose and may be more comfortable amid the greater diversity of ideas in a larger public school.<sup>2</sup> Clearly, the quality of the match between an individual teacher and a school is an important factor for keeping teachers happy in their work.

Well-designed induction and mentoring programs for new teachers also can be important. One study that examined such programs found that novices – a group at risk of high turnover – were less likely to leave schools where they had mentors matched to their subject area and group induction programs that allowed

## Aspects of New Job that Former Teachers Consider Most Superior to Teaching

- *Ability to balance personal & work life*
- *Autonomy/control over own work*
- *Recognition/support from superiors*
- *Salary*
- *Opportunities for advancement/promotion*
- *Professional prestige*
- *Intellectual challenge & manageable load (tie)*

Source: NCES

them to work with other teachers on such key duties like planning. Collaboration and support from other faculty and, to a lesser degree, school administrators raised the likelihood new teachers would stay.<sup>13</sup>

## Current Practices & Policies

While many states and local districts have programs in place to retain teachers, the content and reach of these programs varies considerably.<sup>21</sup> Mentoring and induction (also called orientation) programs for new teachers are popular, but as with any intervention, specific details of how they are implemented make a big difference in their success rates. Mentoring can range from occasional classroom observations and meetings with a senior teacher to carefully designed supervision with formal observation protocols and documentation. A full-scale induction program is more comprehensive, ideally including well-designed mentoring in addition to ongoing professional development, standards-based evaluations, and other features, such as access to a network of colleagues to assist with planning, classroom management, and other responsibilities. In 2007, over half the states had both mentoring and induction policies and at least another quarter had mentoring alone. While some states just established policies, more than half of those also required districts to actually implement a program.<sup>22</sup>

Colorado already offers – or is working to construct – some provisions that research has found effective at reducing turnover. For example, the state requires districts to provide induction programs that must be approved by the state. Further, the Colorado Department of Education’s (CDE) Educator Effectiveness initiative is in the midst of a teacher quality project that includes pieces on recruitment, induction programs for new teachers, and programs to support in-service teachers. One piece of the initiative helps schools and districts carry out “mutual consent hiring,” mandated under certain circumstances by the 2010 reform law Senate Bill 10-191, which requires that both the applicant and the principal agree that the applicant’s qualifications and experience match the school’s needs. Ideally, other teachers at the school help with the decision in a nod to shared decision-making.<sup>23</sup>

The Colorado Department of Education’s (CDE) Educator Effectiveness initiative, built in large part around

requirements of the reform law Senate Bill 10-191, provides practical advice on recruitment, induction programs for new teachers, and programs to support teachers on the job. For example, to help schools and districts carry out the state’s new requirement for “mutual consent hiring” the CDE initiative’s Web site provides a document by the Legacy Foundation and the New Teacher Project on interview techniques. An important part of CDE’s Educator Effectiveness initiative comes from how it is leveraging the new State Longitudinal Data System. The new data system will allow districts to determine which teachers are successful with which students and to better study retention patterns of different groups of teachers over time.

## What’s Next?

Given the importance of a high quality teaching force, teacher attrition, mobility, and retention are large and active areas of research. Numerous studies have investigated why teachers quit or switch schools from an array of angles, while others have gauged the effectiveness of various interventions designed to promote retention. While generalizations are hard to draw from such a large, diverse body of research, the best studies have produced evidence about characteristics of schools and teachers that are useful for policymakers to consider. Several are displayed in Figure 2.

Because retention programs vary among states and local districts, broad generalizations about current

practices also are difficult. However, a close reading of high-caliber research can help explain why a given program did or did not work in the locations studied.

**Figure 2. Actions to Promote Stability**

Condition	Responses Found Effective in Research
Young or beginning teachers	Well-designed induction programs and mentoring; support from administrators and colleagues
Low-income or low-achieving students	Adequate stipend to compensate for instructional challenges; good working conditions, shared decision-making, and respect from administration to keep high-ability teachers in the school
All types of teachers	Competitive pay; participation in decision-making; supportive administration; strong professional community; autonomy

## About the Education Innovation Institute

The Education Innovation Institute, created in 2009 by the Colorado General Assembly, identifies and interprets the nation’s best research on current education issues to help shape policy and reform. It is housed at the University of Northern Colorado, a leader in teacher education since 1889. For more information about EII and its work, visit [www.unco.edu/eii](http://www.unco.edu/eii).

## Recommendations for Policymakers

- *Leadership matters. Principals can foster a strong professional community by promoting autonomy, communicating expectations clearly, encouraging collegiality, creating a fair evaluation process, providing instructional support, and recognizing good work.*
- *Positive school organizational conditions, such as manageable class sizes and shared decision-making, also can improve retention.*
- *Induction programs for new teachers are most successful if they provide mentors matched by subject area, support from colleagues with tasks like planning, and regular opportunities to meet with other new teachers to share needs and experiences.*
- *Although teachers often rate working conditions as more important than salaries, competitive pay can undercut the allure of other jobs requiring similar levels of education.*
- *Conducting cost-benefit analyses can help districts ascertain the full cost of replacing teachers who leave and analyze whether expensive incentives have the desired result.*
- *Maintain good data to observe changes in turnover among districts and over time. Analyses of the characteristics and costs of turnover are possible only if a district keeps longitudinal data that is detailed and organized to study turnover.*

## References

*NOTE: The citations below are hyperlinked to their source, simply click on the blue citation title.*

1. Keigher, A. and Cross, F. (2010). [Teacher Attrition and Mobility: Results From the 2008–09 Teacher Follow-up Survey](#). Washington, D.C. National Center for Education Statistics.
2. Ingersoll, R. M. (2001). [Teacher turnover and teacher shortages: An organizational analysis](#). *American Educational Research Journal*, 38(3), 499-534.
3. Guin, K. (2004). [Chronic Teacher Turnover in Urban Elementary Schools](#). *Education Policy Analysis Archives*, 12(42), 1-30.
4. Borman, G. D., & Dowling, N. M. (2008). [Teacher attrition and retention: A meta-analytic and narrative review of the research](#). *Review of Educational Research*, 78(3), 367-409.
5. Barnes, G., Crowe, E., and Schaefer, B. (2007). [The Cost of Teacher Turnover in Five School Districts: A Pilot Study](#). Washington, D.C. National Commission on Teaching and America's Future.
6. Simpkins, J. (2011). [What Does Washington State Get for Its Investment in Bonuses for Board Certified Teachers?](#) Seattle, WA. Center on Reinventing Public Education.
7. Clotfelter, C., Glennie, E., Ladd, H., & Vigdor, J. (2008). [Would higher salaries keep teachers in high-poverty schools? Evidence from a policy intervention in North Carolina](#). *Journal of Public Economics*, 92(5-6), 1352-1370.
8. Grissmer, D. W., & Kirby, S. (1987). [Teacher attrition: The uphill climb to staff the nation's schools](#). Santa Monica, CA: RAND.
9. Stinebrickner, T. R. (2002). [An analysis of occupational change and departure from the labor force: Evidence of the reasons that teachers leave](#). *The Journal of Human Resources*, 37(1), 192.
10. Boyd, D., Lankford, L., Loeb, S., & Wyckoff, J. (2005). [Explaining the short careers of high-achieving teachers in schools with low-performing students](#). *American Economic Review*, 95(2) 166-171.
11. Podgursky, M., Monroe, R., & Watson, D. (2004). [The academic quality of public school teachers: An analysis of entry and exit behavior](#). *Economics of Education Review*, 23(5), 507–518.
12. Hanushek, E.A., & Rivkin, S.G. (2008). [Do Disadvantaged Urban Schools Lose Their Best Teachers?](#) Brief 7. National Center for Analysis of Longitudinal Data in Education Research.
13. Smith, T.M., and Ingersoll, R.M. (2004). [What Are the Effects of Induction and Mentoring on Beginning Teacher Turnover?](#) *American Educational Research Journal*, 41(3), 681–714.
14. Loeb, S., Darling-Hammond, L. and Luczak, J. (2005). [How Teaching Conditions Predict Teacher Turnover in California Schools](#). *Peabody Journal of Education*, 80(3), 44-70.
15. Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). [Why public schools lose teachers](#). *Journal of Human Resources*, 39(2), 326–354.
16. Stockard, J., & Lehman, M. B. (2004). [Influences on the Satisfaction and Retention of 1st-Year Teachers: The Importance of Effective School Management](#). *Educational Administration Quarterly*, 40(5), 742-771.
17. Weiss, E. M. (1999). [Perceived workplace conditions and first-year teachers' morale, career choice commitment, and planned retention: A secondary analysis](#). *Teaching and Teacher Education*, 15(8), 861-879.
18. Singh, K., and Billingsley, B.S. (1998). [Professional Support and Its Effects on Teachers' Commitment](#). *The Journal of Educational Research*, 91(4), 229-239.
19. Johnson, S.M., and Birkeland, S.E. (2003). [Pursuing a "Sense of Success": New Teachers Explain Their Career Decisions](#). *American Educational Research Journal*, 40(3), 581-617.
20. Rosenholtz, S.J. (1985). [Effective Schools: Interpreting the Evidence](#). *American Journal of Education*, 93(3), 352-388.
21. Education Commission of the States (n.d.) [Induction Programs and Mentoring Web site](#).
22. Kauffman, J. (2007). [State Induction Programs and Mentoring for New and Beginning Teachers](#). Denver, CO. Education Commission of the States.
23. Colorado Department of Education. (n.d.) [Educator effectiveness — a Colorado priority](#). Web site.