### **Teacher Retention in Tennessee**

Are We Keeping Our Best Teachers?

OFFICE OF RESEARCH AND POLICY
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#### **EXECUTIVE SUMMARY**

This report examines the extent to which teacher retention rates in Tennessee schools differ according to teachers' effectiveness and the ways this information might inform strategic retention efforts at the state and district levels. We find promising evidence that improvements in certain working conditions have the potential to improve the retention rates of highly effective teachers.<sup>1</sup>

Through this analysis, we find that:

- Teachers who earn higher overall teacher evaluation scores tend to be retained at slightly higher rates than teachers who earn lower overall teacher evaluation scores, although the differences in these rates are not particularly large (page 5).
- **Early career teachers** are slightly less likely to be retained than other teachers. Highly effective early career teachers tend to be retained at slightly higher rates than other early career teachers (page 6).
- **Highly effective minority teachers** are considerably more likely to leave Tennessee public schools than other highly effective teachers (page 6).
- There is **substantial variation across districts** in overall retention rates, retention rates of teachers earning high evaluation scores, and the degree to highly effective teachers are retained at a higher rate than other teachers (page 7).
- School conditions such as effective time use and functional teacher evaluation
  were significantly related to retention rates of highly effective teachers. As a
  result, strategies aimed at improving these factors have the potential to improve
  the retention of these teachers (page 9).

<sup>1.</sup> For the purposes of this paper, we use the phrase "highly effective teachers" to refer to those teachers who receive an overall level of effectiveness of Level 4 or Level 5 in Tennessee's multiple measure teacher evaluation system.

#### INTRODUCTION

While most teachers in Tennessee remain in their positions for many years, it is also the case that some of the most effective teachers depart each year, either to go teach in a different school, a different district, or sometimes to leave the profession entirely. Not all of these moves are avoidable, but finding ways to retain as many high quality teachers as possible represents a central challenge for all administrators. This brief adds to a substantial body of research on teacher retention by focusing on the relationship between retention rates and teacher effectiveness and the variation across schools and districts in the state of Tennessee.<sup>2</sup> The report addresses the following questions:

- What are the overall retention rates in Tennessee public schools? How does the likelihood that a teacher remains for another year differ by the teachers' years of teaching experience?
- How do retention rates vary according to teachers' overall level of effectiveness derived from Tennessee's multiple measure teacher evaluation system (TEAM)?
- Are highly effective early career and minority teachers retained at similar rates to other highly effective teachers?
- How do overall retention rates and the retention rates of highly effective teachers vary across districts? Does district size help to explain any variation?
- What school-level factors seem to be driving retention, particularly of highly effective teachers?

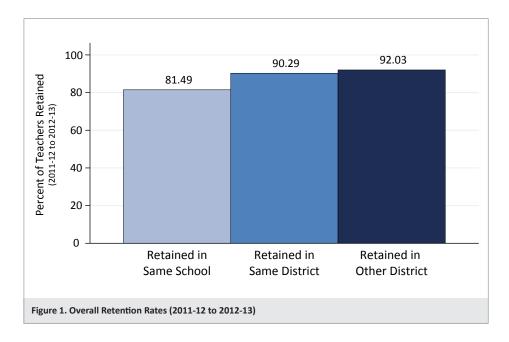
<sup>2.</sup> Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research, 78*(3), 367–409; Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. (2011). The influence ofschool administrators on teacher retention decisions. *American Educational Research Journal, 48*(2), 303–333; Horng, E. L. (2009). Teacher tradeoffs: Disentangling teachers' preferences for working conditions and student demographics. *American Educational Research Journal, 46*(3), 690–717; Glazerman, S., Loeb, S., Goldhaber, D., Staiger, D., Raudenbush, S., & Whitehurst, G. (2010). *Evaluating teachers: The important role of value-added* (No. 6829). Mathematica Policy Research; Boyd, D., Lankford, H., Loeb, S., Ronfeldt, M., & Wyckoff, J. (2011). The role of teacher quality in retention and hiring: Using applications to transfer to uncover preferences of teachers and schools. *Journal of Policy Analysis and Management, 30*(1), 88-110; Goldhaber, D., Gross, B., & Player, D. (2011). Teacher career paths, teacher quality, and persistence in the classroom: Are public schools keeping their best?. *Journal of Policy Analysis and Management, 30*(1), 57-87; Jacob, A., Vidyarthi, E., & Carroll, K. (2012). The irreplaceables: Understanding the real retention crisis in America's urban schools. *TNTP*.

# OVERALL TEACHER RETENTION RATES IN TENNESSEE PUBLIC SCHOOLS

All data in this paper examine whether teachers in Tennessee public schools during the 2011-12 school year (the first year of implementation of the TEAM evaluation system) were retained in the 2012-13 school year.<sup>3</sup> For the purposes of this paper, retention is defined broadly as continuing to teach in the 2012-13 school year in Tennessee public schools. All teachers who taught in Tennessee public schools in the 2011-12 school year had four potential retention outcomes in the 2012-13 school year:

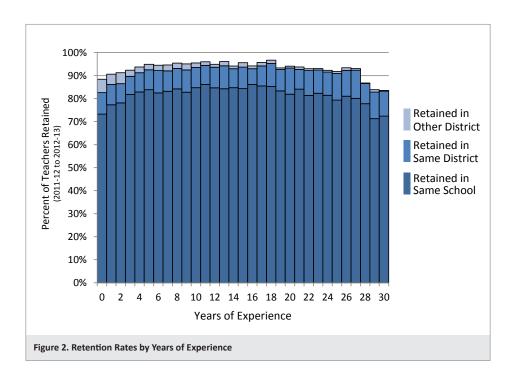
- 1. Retained—taught in the same school
- 2. Retained—taught in the same district
- 3. Retained—taught in a different district
- 4. Not retained—did not teach in Tennessee public schools

Figure 1 shows the percent of teachers retained within the same school, within the same district, and within Tennessee public schools. This figure illustrates that **while 92 percent of teachers continued to teach in Tennessee schools, about 10 percent of teachers taught at a different Tennessee school in the 2012-13 school year.** Results from the 2008-09 Teacher Follow-up Survey found that 84.5% of teachers across the United States were retained in the same school.



<sup>3.</sup> While future analyses could include retention data from multiple years, including from the 2012-13 school year to the 2013-14 school year, we chose to examine a single year of data in order to produce an initial report in a timely manner and to use the data that we believed to be most accurate about teachers' placements from year to year. Due to data quality issues, teachers in Memphis City Schools are not included in this analysis.

As expected, early and late career teachers were retained at lower rates than mid-career teachers. Figure 2 displays retention rates by the teacher's prior years of experience. The height of the dark blue bar represents the percent of teachers retained within the same school, the height of the medium blue bar represents the percent of teachers who moved to a different school within a same district, and the height of the light blue bar represents the percent of teachers who moved to a different district. The overall height of each bar represents the percent of teachers who were retained in Tennessee public schools. While teachers at all experience levels sometimes moved to different schools within the same district, early career teachers were the most likely to move across districts.



## RETENTION RATES AND TEACHER EFFECTIVENESS

In the 2011-12 school year, Tennessee began implementation of the multiple component TEAM teacher evaluation system. TEAM includes observation scores from multiple observations, growth scores, and achievement measure scores; these components are combined to arrive at an overall level of effectiveness of Level 1, 2, 3, 4, or 5. This section of the paper seeks to examine whether teachers who received higher overall levels of effectiveness were retained at different rates than teachers who received lower overall levels of effectiveness. In the remainder of this paper we refer to teachers earning the highest two levels—Level 4 or Level 5—as highly effective teachers.

Figure 3 displays retention rates for teachers by overall level of effectiveness. Highly effective teachers—those who earned a score of Level 4 or Level 5—tended to be retained at a higher rate than teachers who earned a score of Level 1, 2, or 3. The difference between the retention rates of teachers who earned a score of Level 3, 4, or 5, however, was largely negligible. One interpretation for this result is that teachers who performed at or above expectations were retained at a similar rate and that rate exceeded the retention rate of teachers performing below expectations. Overall, the state lost 1,253 teachers who earned a score of Level 5 in 2011-12.

Teachers who performed at level 3, 4, or 5 were retained at a similar rate and that rate exceeded the retention rate of teachers performing below expectations.

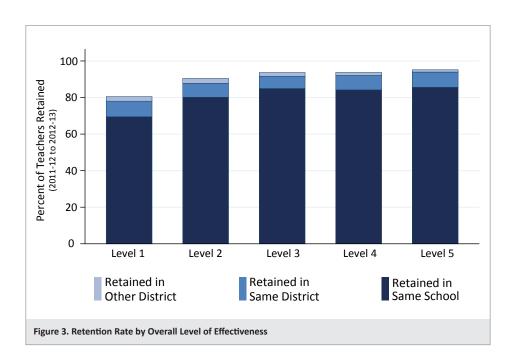


Figure 4 displays the same information for teachers who were in their first, second, or third year of teaching during the 2011-12 school year. While the trends are similar to those observed for all teachers, early career teachers are retained at lower rates across the board and highly effective early career teachers are more likely to change schools or districts than the typical highly effective teacher. This suggests that districts and schools could improve their proportion of effective teachers by finding ways to retain highly effective early career teachers at a higher rate. In all, about 500 early career teachers who earned an overall level of effectiveness of 4 or 5 in 2011-12 did not teach in Tennessee in the 2012-13 school year.

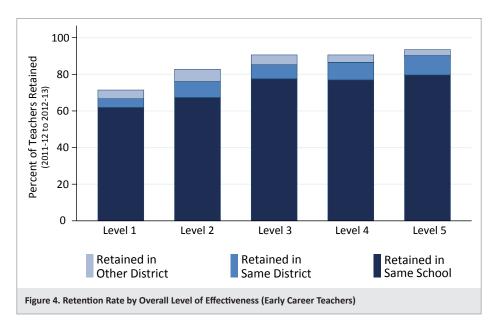
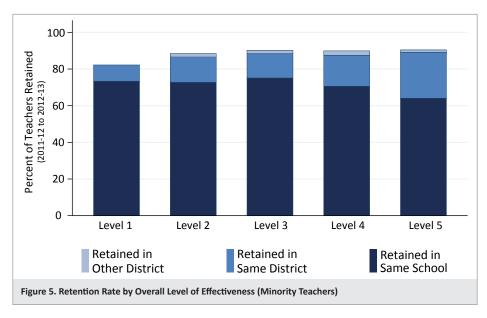
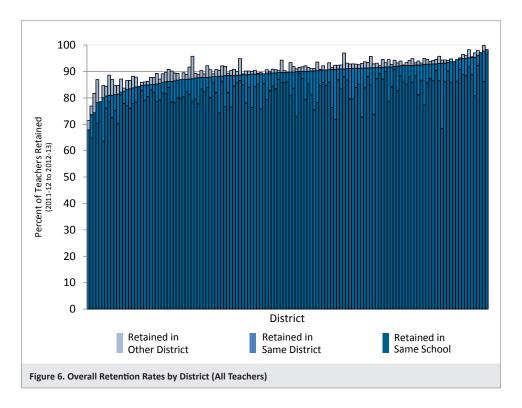


Figure 5 illustrates the retention rates of minority teachers according to their overall level of effectiveness. Unlike the trend for all teachers, there is little difference in the overall retention rates of minority teachers who earn Levels 2 through 5. Additionally, over a third of minority teachers who earn a Level 5 switched schools between years. The retention rate of Level 5 minority teachers within Tennessee public schools (90.4 percent) lags behind the overall retention rate of Level 5 teachers (95.2 percent) and even the retention rate of early career Level 5 teachers (93.4 percent). Strategies should be considered to improve the retention of minority teachers generally, but especially those who prove to be highly effective.



#### **VARIATION ACROSS DISTRICTS**

Retention rates vary considerably across districts. Figure 6 shows retention rates for each district in Tennessee. The figure consists of many vertical bars, each representing a single district, placed alongside each other and sorted by the district retention rate. The district's retention rate can be found by looking at the combined height of the dark blue bar (retained in same school) and the medium blue bar (retained in different school, same district). As the figure shows, district retention rates tend to fall between around 85 and 95 percent, although some districts in this range display considerable movement of teachers from school to school while others look far more stable.



There is also **considerable variation in the rate at which districts retain their Level 5 teachers,** as illustrated by Figure 7. Most districts retain over 90 percent of their Level 5 teachers; 18 districts retained less than 90 percent. The variation is not explained by district size—small, medium, and large districts all varied considerably in their retention of Level 5 teachers. This suggests that it is possible for rural, urban, and suburban districts to retain their most effective teachers at high rates.

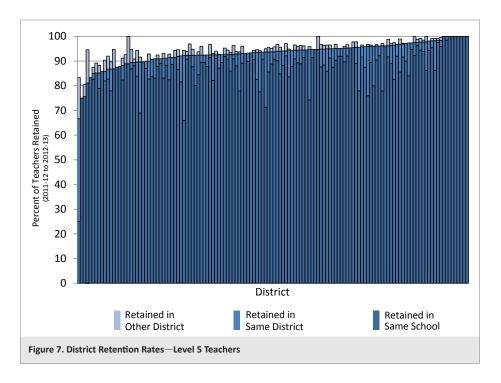
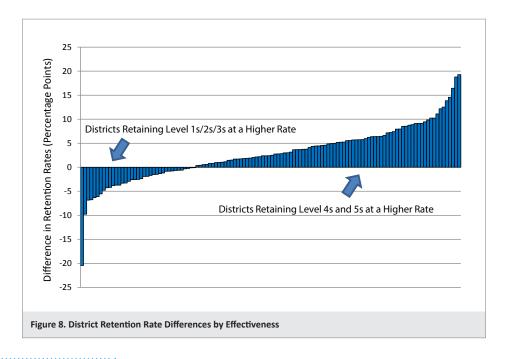


Figure 8 displays the difference in district retention rates between highly effective teachers—those earning a score of Level 4 or 5—and teachers earning scores of Level 1, 2, or 3.4 For example, a district with a retention rate of 95 percent for Level 4 and 5 teachers and a 90 percent retention rate for Level 1, 2, and 3 teachers would have a difference of +5 percent. This figure shows that there is **considerable variation across districts in whether they are able to retain more effective teachers at a higher rate than less effective teachers.** While the majority of districts retain more effective teachers at a higher rate, 37 districts retain teachers earning scores of Level 1, 2, or 3 at a higher rate than teachers earning a score of Level 4 or 5. As in the case of the retention rates of the Level 5 teachers, this variation is not explained by district size.



<sup>4.</sup> Only districts with at least 10 teachers in each group are included in this analysis (as depicted in Figure 8).

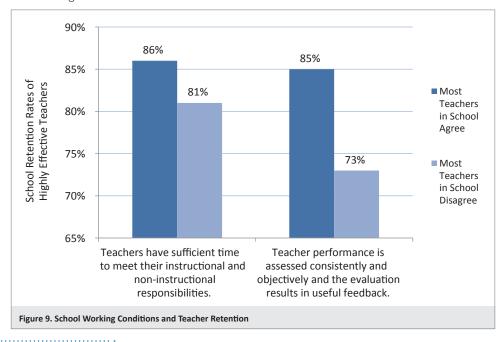
## RETENTION OF HIGHLY EFFECTIVE TEACHERS AND SCHOOL WORKING CONDITIONS

Recent research has found that schools with strong working conditions have higher rates of teacher retention, yet relatively few studies have looked at the factors that specifically contribute to the retention of a school's most effective teachers.<sup>5</sup> We explored which working conditions were associated with retention of highly effective Tennessee teachers—those earning an overall level of effectiveness of 4 or 5. School-level ratings of several school working conditions were obtained from teachers' responses to a statewide survey of school working conditions, the Teaching, Empowering, Leading and Learning (TELL) survey.<sup>6</sup> Teachers were asked to strongly agree, agree, disagree or strongly disagree with several items related to each working condition category.

Of the working conditions included in this analysis, effective time use and functional teacher evaluation were significantly related to retention rates of highly effective teachers.<sup>7</sup>

- **Effective time use** occurs when teachers have sufficient time to meet their instructional and non-instructional responsibilities in the school.
- Functional teacher evaluation means teacher performance is assessed consistently and objectively and the evaluation results in useful feedback.

Figure 9 compares average school retention rates of effective teachers for (a) schools where most teachers agreed with the working condition survey items to (b) schools where most teachers disagreed.



- 5. 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; Johnson, S. M., Kraft, M. A., & Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers College Record*, 114(10), 1-39; Jacob, A., Vidyarthi, E., & Carroll, K. (2012). The Irreplaceables: Understanding the real retention crisis in America's urban schools. *TNTP*.
- 6. Since we are interested in school-level teacher retention rates from 2011-12 to 2012-13, we used data from the 2011 TELL survey. In 2011, over 70 percent of Tennessee teachers responded.
- 7. The school working conditions included effective time use, peer collaboration, professional development, professional expertise, resources, school culture, student behavior expectations, and teacher evaluation.

## STRATEGIES FOR INCREASING RETENTION OF HIGHLY EFFECTIVE TEACHERS

Given these findings, we suggest possible strategies for improving working conditions with the goal of increasing school-level retention of highly effective teachers.

For schools where most teachers agreed that teachers have sufficient time to meet their instructional and non-instructional responsibilities, the average retention rate of highly effective teachers was 86 percent; schools where most teachers disagreed had an average retention rate of highly effective teachers of 81 percent. Other research supports the finding that teachers who are more satisfied with their time use are more likely to stay teaching. A national study of teacher retention found that teachers who left teaching reported lack of planning time and too heavy workload as top sources of dissatisfaction. To increase the retention of highly effective teachers, district and school leaders should implement policies and practices that protect teachers' time by ensuring that:

- Teachers are allowed to focus on educating students with minimal interruptions.
- Teachers are protected from duties that interfere with their essential role of educating students.
- The non-instructional time provided for teachers in my school is sufficient.

The average highly effective teacher retention rate for schools where most teachers agreed that their schools' teacher evaluation process was consistent, objective, and useful was 85 percent, whereas schools where most teachers disagreed had an average highly effective teacher retention rate of 73 percent. This finding is not surprising given that research has found that teachers were more likely to stay in their schools if their school supported them in improving their teaching practices. Thus, focusing on the systems and processes around teacher evaluation also offers a promising means for increasing retention rates of the most effective teachers. In particular, districts and schools should work to ensure that:

- Teachers receive feedback that can help them improve teaching.
- Teacher performance is assessed objectively.
- The procedures for teacher evaluation are consistent.

We acknowledge that other working conditions may be important for retaining highly effective teachers or for other school outcomes. These suggested strategies are meant to provide guidance to school and district leaders working to improve their ability to retain their most effective teachers.

<sup>8.</sup> Wirt, J., Choy, S., Rooney, P., Hussar, W., Provasnik, S., & Hampden-Thompson, G. (2005). The Condition of Education, 2005. NCES 2005-094. *National Center for Education Statistics*.

<sup>9.</sup> Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal,* 40(3), 581-617; Jacob, A., Vidyarthi, E., & Carroll, K. (2012). The Irreplaceables: Understanding the real retention crisis in America's urban schools. *TNTP*.