Transforming the Pool of Tenured Teachers in Tennessee

TN EDUCATION RESEARCH ALLIANCE

A Research Brief on Strengthening Tennessee's Education Labor Market — *December 2019*

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Introduction

Historically, tenure in Tennessee and the country at large was a district specific and often subjective process—teachers teaching in a single district for three consecutive years were evaluated locally under broad state guidelines, granted tenure and its associated job protections afforded through due process, and subsequently guaranteed a teaching position within the district. This is not to say that tenure was automatic before recent reforms, however. The original purpose of tenure in Tennessee was to ensure teachers were guaranteed both due process and the academic freedom to voice concerns over academic procedures without repercussions. More recent criticisms and the statewide and national debate surrounding teacher tenure policy have focused on the difficulty of dismissing teachers with lifetime tenure protections and the perceived subjective fashion by which tenure was granted regardless of teachers' performance on the job (Kahlenberg, 2016). Responding to these criticisms, Tennessee proposed numerous changes to its teacher tenure process as part of its Race to the Top grant, which were ultimately enumerated into law. The primary thrust of the reform was to ensure that, going forward, tenure was only granted to educators with proven effectiveness.

This brief examines how the pool of eligible teachers changed after the implementation of tenure reform in Tennessee. We first confirm whether the mechanical consequences of the new policy resulted in fewer teachers—with higher average performance—receiving tenure. We then investigate whether tenure reform was associated with equitable changes in the composition of newly tenure-eligible teachers with regard to gender, race, school performance, and poverty.

It appears that the tenure policy reforms resulted in several key changes; in the years following the reforms, the total number of teachers receiving tenure decreased, the average effectiveness of newly tenured teachers was higher as less effective teachers were unlikely to receive tenure post-reform, and importantly, racial and gender diversity among the newly tenured teacher workforce remained stable.

However, our results also show a potential indirect consequence of the tenure changes – fewer teachers from low-income and low-performing schools are now eligible for tenure under the new system.

Overall, while we do not know what impact (if any) these policies will have on student achievement or the overall quality of the teaching workforce, it appears that they effectively restrict tenure eligibility to the highest-performing teachers. At the same time, it is reassuring that the policy has not reduced equitable access to tenure protections for teachers by gender and race. Yet, it is also concerning that the number of tenured teachers in high-poverty schools has decreased. Assuming that obtaining tenure is the goal for a majority of teachers, the reforms may exacerbate issues like teacher turnover in high-poverty schools, which are already experiencing turnover at rates that are far too high.

We find four ways in which the pool of eligible teachers changed:

1. ***The total number of newly tenured teachers substantially decreased after the tenure reforms took effect.***
2. ***The average performance of newly tenured teachers was higher after tenure reform.***
3. ***The demographic composition of tenure-eligible teachers remained stable after tenure reform.***
4. ***The proportion of newly tenured teachers from low-performing and high-poverty schools decreased in the post-reform years.***

HOW TENURE ELIGIBILITY CHANGED

Tennessee's 2011 tenure reforms did not change the job protections associated with tenure itself. Rather, the reforms changed the ways in which teachers and principals can become eligible for tenure, and even make it possible to lose tenure status. As the table below describes, the reforms brought about three major changes to tenure eligibility requirements. Most notably, teacher performance information became part of the tenure review process, requiring teachers to demonstrate high performance under the state's educator evaluation system in order to become eligible for tenure, and teachers now have the potential to lose tenure status upon demonstrating poor performance. Additionally, the pre-tenure teaching period requirement was extended from three to five years.

TABLE 1: Major changes to teacher tenure process, passed April 2011

TENURE CHARACTERISTIC	BEFORE 2011 REFORM	AFTER 2011 REFORM
Probation period required to become eligible for tenure	*Teacher completes three school years within the district*	*Teacher completes five school years within the district*[1]
Evaluation scores required to become eligible for tenure	*Did not apply*	*Teacher must receive evaluation scores "Above Expectation" or higher (Level 4 or 5) during the last two years of the probationary period*
Removal of tenure status	*Did not apply*	*Teacher receives evaluation scores "Below Expectation" or lower (Level 1 or 2) for two consecutive years*

Source: Tenn. Code Ann. § 49-5-501–515.

HOW WE EXAMINE CHANGES TO THE TEACHER POOL

To examine changes to the teacher pool, we use administrative records containing background information on every teacher in the state. In total, we use data from the 2004–05 through 2014–15 school years, though certain data elements are only available for a subset of those years (for example, school-level proficiency information is only available from the 2009–10 school year forward).

For the purpose of making comparisons, we identify teachers eligible for tenure under Tennessee's reformed tenure system based on the number of years they taught within their district and their history of level of effectiveness (LOE) ratings under the statewide education evaluation system.[2] We also identify teachers who would have been eligible for tenure had the eligibility requirements not changed in the post-reform years to compare differences with teachers who did in fact meet the new tenure eligibility requirements. To measure teacher effectiveness, we use TVAAS index scores, which are a combined estimate based on student test score gains for students that a teacher instructs, as well as subject-specific value-added estimates for mathematics and English Language Arts (ELA)[3]

We focus on two measures of school context to better understand the settings teachers are working in during the pre-reform and reformed tenure systems. The first is a measure of school poverty status, which we define as the top quintile of schools in the state during any given year according to the share of students who qualify for free- or reduced-price lunch services. Our second school context measure gauges overall school achievement level. We classify schools as low-performing if they fall into the top quintile of schools in the state during any given school year according to the share of students scoring basic or below basic on standardized state assessments.

To explore whether particular characteristics among teachers who are newly eligible for tenure have changed over time, we used a regression-based approach.[4] In other words, we look for differences across years in various teacher characteristics (such as race, gender, level of effectiveness, and school context) specifically analyzing whether these qualities are significantly different from their values in 2010-11, the year immediately prior to tenure reform.

1 Teachers granted maternity or other forms of approved extended leave, are expected to demonstrate high performance under a modified probation timeline. Teachers with approved extended leave could still become eligible for tenure upon demonstrating an overall performance effectiveness level of "Above Expectation" or "Significantly Above Expectation" during the final two years being employed in a regular teaching position provided they completed a probationary period that is not less than forty-five months within the last seven-year period (Tenn. Code. Ann. § 49-5-503).

2 We coded teachers eligible for tenure if they taught in the same district for five consecutive years and received the expected evaluation scores (Level 4 or 5) during the final two years of the five-year probation period. Due to complications with administration of standardized tests at the elementary and middle school levels in Tennessee, 2014–15 serves as the final year in our panel that we can credibly identify newly tenure-eligible teachers.

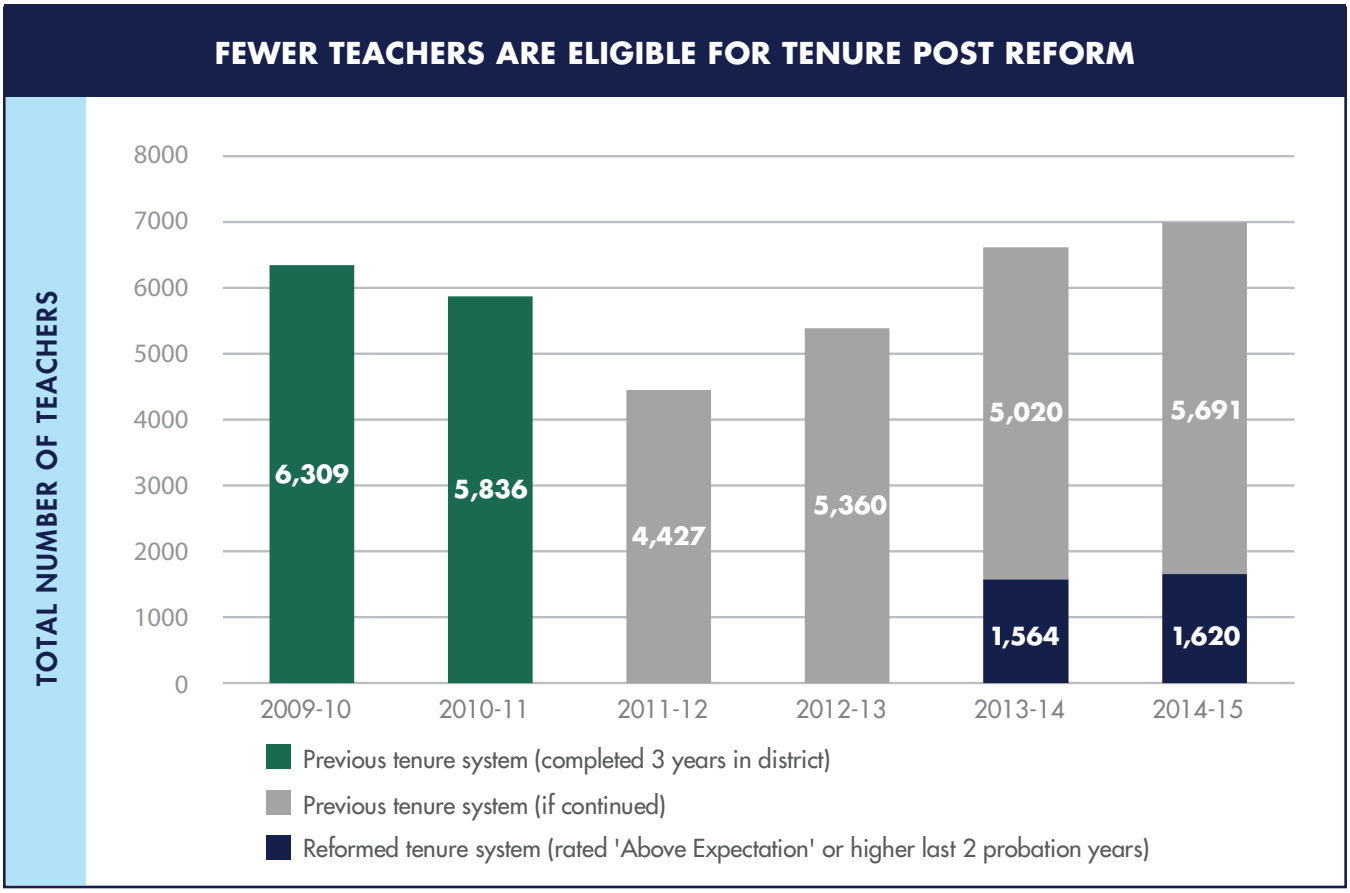
3 We estimate "leave-year-out" value-added measures of teacher effectiveness as outlined by Chetty, Friedman, and Rockoff (2014). We regress student standardized test scores in ELA and mathematics in grades 4 through 8 on prior year test score information and the available set of observable student background characteristics in our data.

4 All regressions were estimated with robust standard errors. For binary characteristics, we test for statistical significance using both ordinary least squares linear probability models as well as logistic regression.

1 THE TOTAL NUMBER OF NEWLY TENURED TEACHERS SUBSTANTIALLY DECREASED AFTER THE TENURE REFORMS TOOK EFFECT.

Since the new tenure reforms took hold, the number of teachers who are eligible for tenure substantially decreased. Given the extension in probation from three to five years under the reformed tenure system, no teachers became newly eligible for tenure immediately after tenure reform during the 2011–12 and 2012–13 school years. In the years following, around 30% of those teachers who would have been eligible under the old system were also eligible for tenure under the new process (between 1,564 and 1,620 teachers) – a significant decline from years past. However, if the pre-reform tenure system had continued, as displayed by the light gray bars in the figure below, a similar number of teachers would have been eligible for tenure in those years (between 4,427 and 5,691 teachers).

FEWER TEACHERS ARE ELIGIBLE FOR TENURE POST REFORM

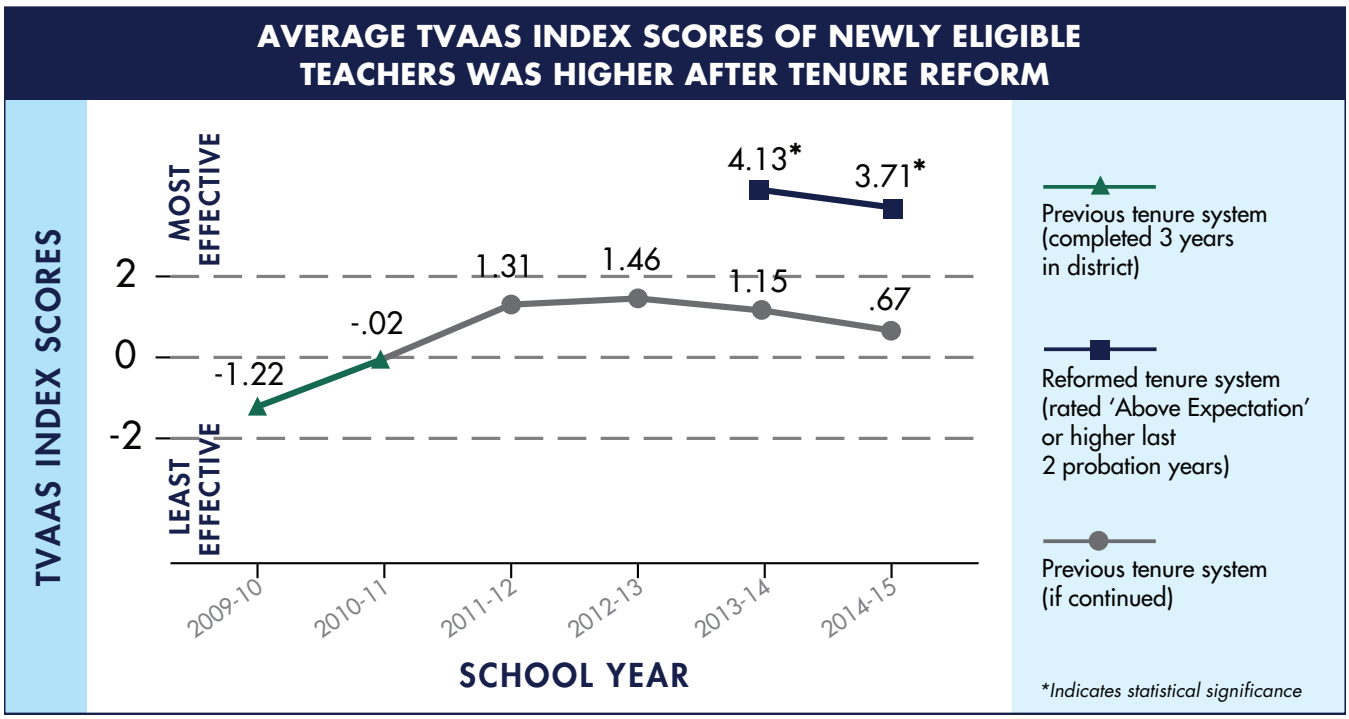


2 THE AVERAGE PERFORMANCE OF NEWLY TENURED TEACHERS WAS HIGHER AFTER TENURE REFORM.

One of the goals of the tenure reforms was to ensure that only teachers with proven effectiveness would be granted job protections in order to improve the quality of the overall workforce. Our results show that since 2011, there has been a marked increase in the average effectiveness of newly tenured teacher cohorts post-reform compared to the average effectiveness of teachers who received tenure pre-reform. Prior to 2011, the average TVAAS index value for newly tenured teachers hovered just under the median (47th and 49th percentile) of the distribution of TVAAS index scores for all teachers within the workforce (probation, newly tenured, and veteran tenured teachers) in the 2009-10 and 2010-11 academic years. Under the new system, newly tenured teachers have TVAAS index scores well within the "most effective" range and placed at about the 82nd percentile among all teachers within the workforce in both 2013-14 and 2014-15. We find very similar patterns regarding the subject-specific effectiveness of newly eligible teachers in math and ELA.

The observed increase in effectiveness among newly tenured teachers post-reform likely reflects two separate phenomena. First, with the presence of new eligibility requirements, less effective teachers would be unlikely to achieve the required evaluation ratings for tenure eligibility and, therefore, would no longer be categorized within the newly tenured cohort. This exclusion of less effective teachers from tenure eligibility would unsurprisingly boost the average effectiveness of newly tenured teachers post-reform. However, it is also plausible that teachers may implement practices to increase their performance to achieve the evaluation ratings required for tenure eligibility. Under Race to the Top grant funds, TVAAS scores were added to evaluations. Before this, value-added measures were included but were not always utilized in employment decisions. It is possible that the increased emphasis on value added measures contributed to the increased performance in tenured teachers. Yet, considering the substantial decline in the number of newly tenured teachers post-reform, we believe the first factor is the likely driver of higher average effectiveness among newly tenured cohorts.

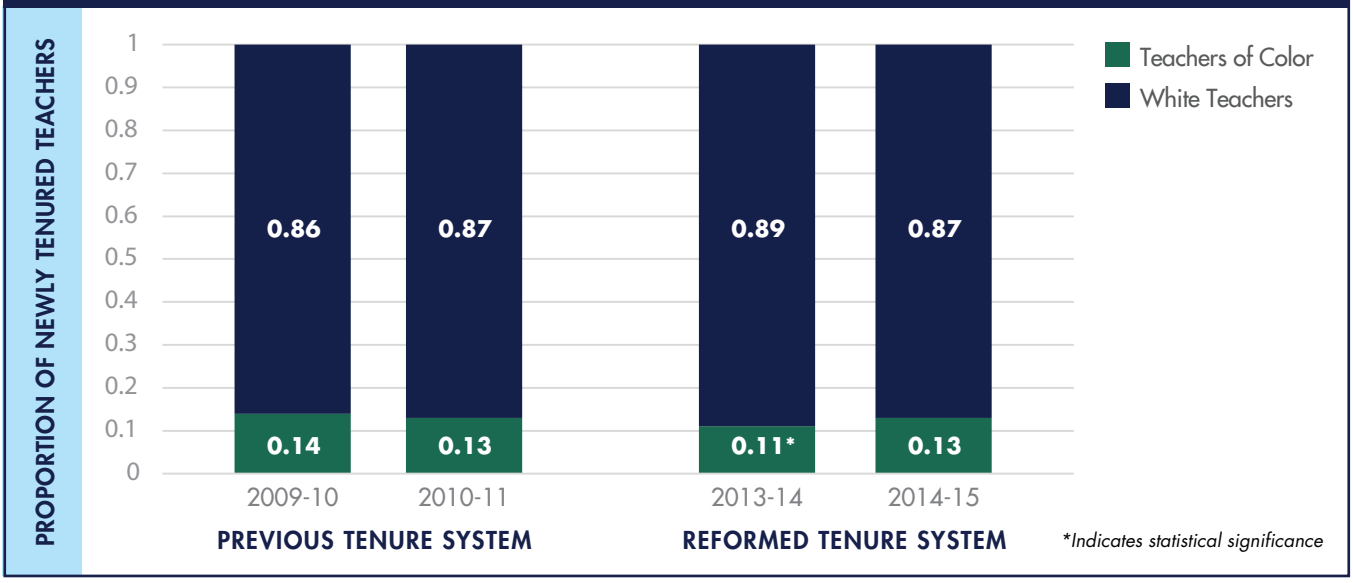
AVERAGE TVAAS INDEX SCORES OF NEWLY ELIGIBLE TEACHERS WAS HIGHER AFTER TENURE REFORM



3 THE DEMOGRAPHIC COMPOSITION OF TENURE-ELIGIBLE TEACHERS REMAINED STABLE AFTER TENURE REFORM.

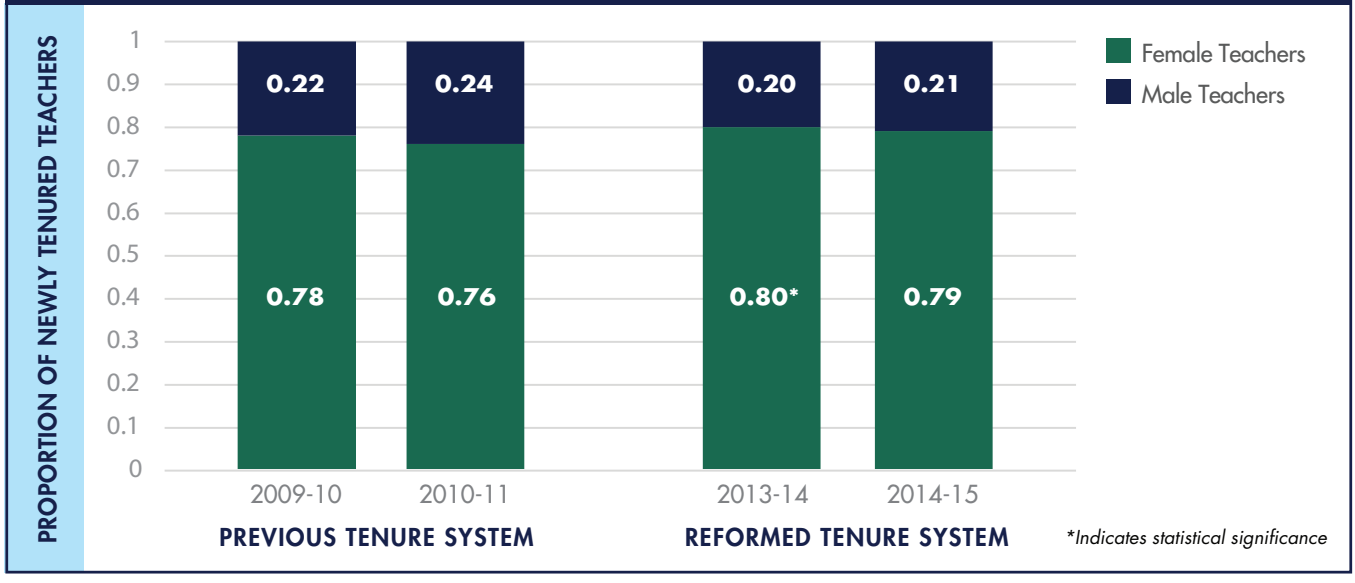
Given that tenure was first institutionalized in part as a form of job protection for female teachers and teachers of color (Kahlenberg, 2015), it is important to examine whether the demographic composition of the eligible teacher pool changed after the tenure reforms took hold. Our results show that while the proportion of newly eligible teachers of color was slightly lower in the first year under the reformed tenure system, the proportion increased the following school year and returned to statistical equivalence with the final year prior to tenure reform.

THE RACIAL COMPOSITION OF NEWLY TENURED TEACHERS REMAINED STABLE



Additionally, the proportion of newly eligible teachers who were female was higher in the first year under the reformed tenure system, but decreased the following year and was no longer statistically different from the year prior to tenure reform. These findings indicate that the demographic composition of teachers did not significantly change after tenure reforms were enacted.

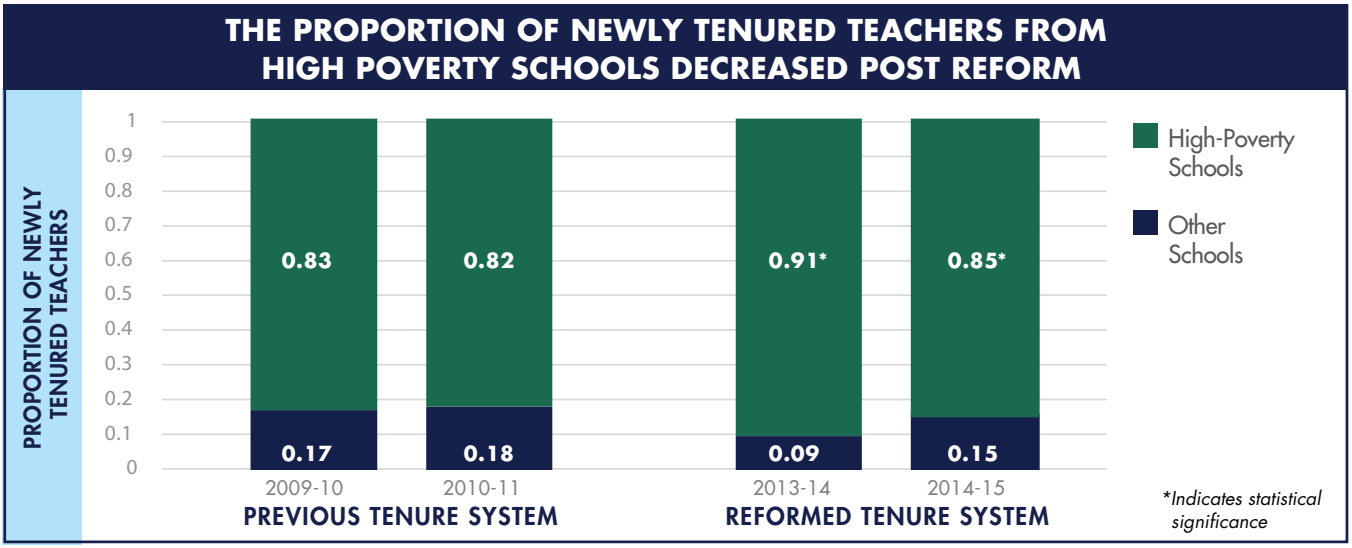
THE GENDER COMPOSITION OF NEWLY TENURED TEACHERS REMAINED STABLE



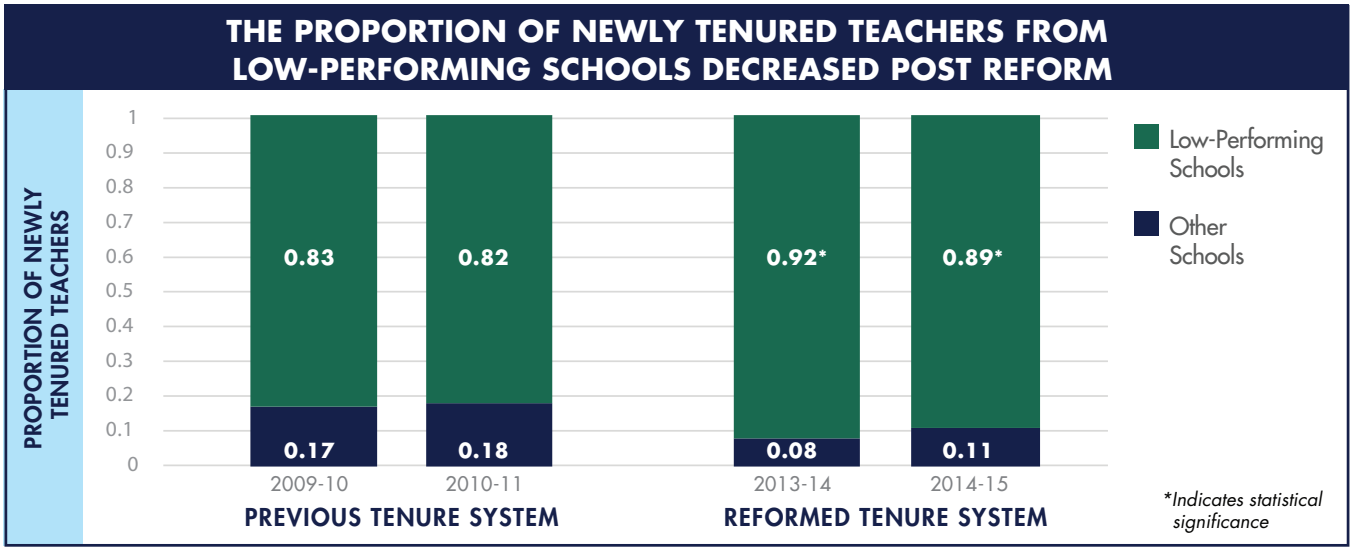
4 THE PROPORTION OF NEWLY TENURED TEACHERS FROM LOW-PERFORMING AND HIGH-POVERTY SCHOOLS DECREASED IN THE POST-REFORM YEARS.

Tennessee's reform legislation did not explicitly seek to restrict tenure eligibility within certain school settings, therefore, it is also important to examine whether tenure eligibility changed among teachers working across varying school contexts, particularly among those working in more challenging school environments. We assess whether newly tenured teachers are more or less likely to teach in certain kinds of school settings, particularly high needs and hard-to-staff schools.

We find a sizeable decrease in eligible teachers from high poverty schools post-reform. Although this number rebounds a bit in the 2014–15 school year, it is still statistically lower than the proportion found in the final pre-reform year.



Additionally, we looked at the proportion of newly eligible teachers in schools that fall in the bottom 20% of schools in the state based on TCAP and end-of-course exams in reading or math in post-reform years. There is a sizeable decrease in the proportion of newly eligible teachers in low-performing schools.[5] **These findings indicate that tenure reforms may have particularly constrained teachers from certain school contexts from becoming eligible for tenure.**



5 *We consider whether this decline is driven by teachers who taught untested subject/grades. The available data permit us to identify teacher tested subject/grade status beginning in the 2009–10 school year. We therefore use data from 2010 onward to explore whether there are differences in the proportion of newly tenure-eligible teachers who taught tested subjects/grades pre/post-reform and found that the decline in proportion of newly eligible teachers from hard-to-staff schools is not singularly confined to any category of teacher (tested or untested subject/grade).*

CONCLUSION AND IMPLICATIONS



Our results show that the tenure policies likely resulted in several key changes. Consistent with the goals of the reforms, the number of teachers who are receiving tenure has decreased while teacher effectiveness among newly tenured teachers was higher, and the diversity of the tenured sector of the teacher workforce has remained stable. Yet we also observe a marked drop in the proportion of newly eligible teachers working in schools with high proportions of low-income and academically low-performing students in the years following the passage of tenure reform. It is important to acknowledge here that we do not know the cause of the shifts in the workforce. Even so, these results seem to match expectations overall, the decrease in tenured teachers from high-poverty schools is concerning, as this could potentially impact turnover rates in schools where turnover is already disproportionately high. If teachers avoid teaching in high-poverty schools because they are afraid of the impact on tenure, policy changes may be needed to address the needs of low-performing schools and consideration into what causes this instability would be important in addressing these findings.

We do not yet know why the proportion of newly eligible teachers from low-income and high-poverty schools significantly decreased. We know there are additional hurdles to overcome in high-need communities and areas that might contribute to this finding. Future research should dig more deeply into this pattern and explore the reasons why fewer teachers from more challenging school environments have obtained tenure in the years after the reforms. If the tenure reforms are indeed an obstacle and tenure proves to be a motivator for teacher recruitment and retention, there are important policy implications that warrant consideration.

On the one hand, school settings serving predominantly traditionally disadvantaged and low-performing students may confront difficulties attracting and retaining high-performing educators capable of receiving the evaluation ratings necessary for tenure eligibility under the reformed system. In this regard, policymakers may wish to explore more policy options to assist these schools to expand and retain their pool of highly effective teachers, such as alternative forms of compensation and bonuses or high-quality professional development and mentorship programs.

On the other hand, the decline in newly tenured teachers who work in high-needs schools may reflect the challenges that teachers in these settings face in achieving the evaluation ratings necessary for tenure eligibility. Considering that the evaluation rating determining tenure eligibility is partially comprised of school-level student performance measures for teachers of untested subjects and grades, teachers in these schools with low student academic performance and/or growth may not have the same shot at achieving tenure as do their counterparts in more advantaged schools. If so, policymakers may wish to consider ways to alter the tenure process to better accommodate teachers in high-needs schools so that they are not placed at a disadvantage.

Understanding how the pool of tenured teachers has changed since the tenure reforms were enacted and digging more deeply into the true effects of these reforms will provide valuable insights to education policymakers and administrators. Future research in this area may shed light on the role that tenure reform plays on the state's ability to cultivate, recruit, and retain a pool of great teachers, particularly in school settings with the greatest challenges.

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