



Exploring Turnover and Retention Patterns among Tennessee's Teachers of Color

TN EDUCATION RESEARCH ALLIANCE

A Research Brief on Strengthening Tennessee's Education Labor Market

November 2018

Amber Ravenell, Jason A. Grissom, and Brendan Bartanen

Introduction

In Tennessee, teachers are not representative of the students they serve. Teachers of color comprise only 13 percent of the overall teacher workforce, while 37 percent of all Tennessee students identify as a race other than White (Collins, 2018). This matters because research shows that when students of color are exposed to teachers of different races, they are more likely to excel academically (Egalite, Kisida, & Winters, 2015). They are also more often identified for gifted services and less likely to be chronically absent from school or face exclusionary discipline (Grissom & Redding, 2016; Gershenson, Holt, & Papageorge, 2016; Lindsay & Hart, 2017).

As Tennessee's student body becomes increasingly diverse, recruiting and retaining teachers of color becomes even more important. Over the next several years, the Tennessee Education Research Alliance (TERA) will release a series of studies related to educator diversity in Tennessee. This initial brief in the series, based on research by Jason A. Grissom and colleagues, explores patterns of turnover among Black and White teachers in Tennessee, and looks at what individual, classroom, and school characteristics predict teacher turnover among teachers of color.^{1,2}

¹ Approximately 98% of Tennessee teachers identify as either White or Black. Other groups make up very small fractions of teachers in the state. Given these small numbers and challenges in administrative data of accurately identifying some other teacher subgroups, the analysis summarized in this brief focuses only on Black and White teachers.

² Much of the analysis summarized in this brief can be found in: Grissom, J.A., Bartanen, B., & Jones, A.A. (2019). Retaining Teachers of Color in an Era of High-Stakes Teacher Evaluation: Investigating Racial Differences in Teacher Evaluation Ratings and Teacher Turnover. Tennessee Education Research Alliance working paper.

We find four key results when we examine turnover rates among teachers of color in Tennessee:

- 1** Black teachers, particularly Black male teachers, are more likely to leave their schools than White teachers. However, they generally move to different schools within the same district rather than leave the profession altogether.
- 2** Turnover is higher among Black teachers in part because they are more likely to work in schools where turnover is higher among all teachers, including schools with more concentrated student poverty and lower average student achievement.
- 3** Turnover among Black teachers is especially high when they are racially isolated. Black teachers turn over at higher rates when they have few Black teachers as colleagues.
- 4** Black principals retain Black teachers at higher rates.



HOW WE MEASURE DIFFERENCES IN TEACHER TURNOVER

Our analysis uses Tennessee data from the 2011-12 through 2015-16 school years. Data include information about employees' personal and professional characteristics (job positions, gender, race and ethnicity, years of experience, and highest degree earned), as well as school and district characteristics (student demographics, enrollment, and student achievement).

We identify teacher turnover in a given year by comparing a teacher's work information in that year to his or her work information in the following year. Teachers who continue into the next year working as a teacher in the same school are labeled as stayers. Teachers who do not are labeled as turning over. Teachers who turn over can be further classified based on their work information as transferring to another school, changing roles to a non-teaching position, or exiting Tennessee schools.

We first quantify the teacher turnover gap by comparing turnover rates each year for Black and White teachers in Tennessee. We also make comparisons breaking Black and White teacher data down by sex.

Next, we test whether differences in teachers' professional characteristics (e.g., experience level) and school characteristics account for the turnover gap between Black and White teachers. We use a statistical technique called regression analysis to predict the likelihood that a teacher leaves his or her school with teacher and school characteristics. This analysis allows for a comparison of otherwise-similar Black and White teachers. For example, it allows us to compare turnover among Black and White teachers working in schools of similar size, demographics, and achievement levels. If we compare teachers in similar schools and find that the turnover gap between Black and White teachers is smaller than when we simply compare the turnover rates among Black and White teachers in general, we can conclude that differences in where Black and White teachers work explain some of the Black-White turnover difference.

KEY FINDINGS



1

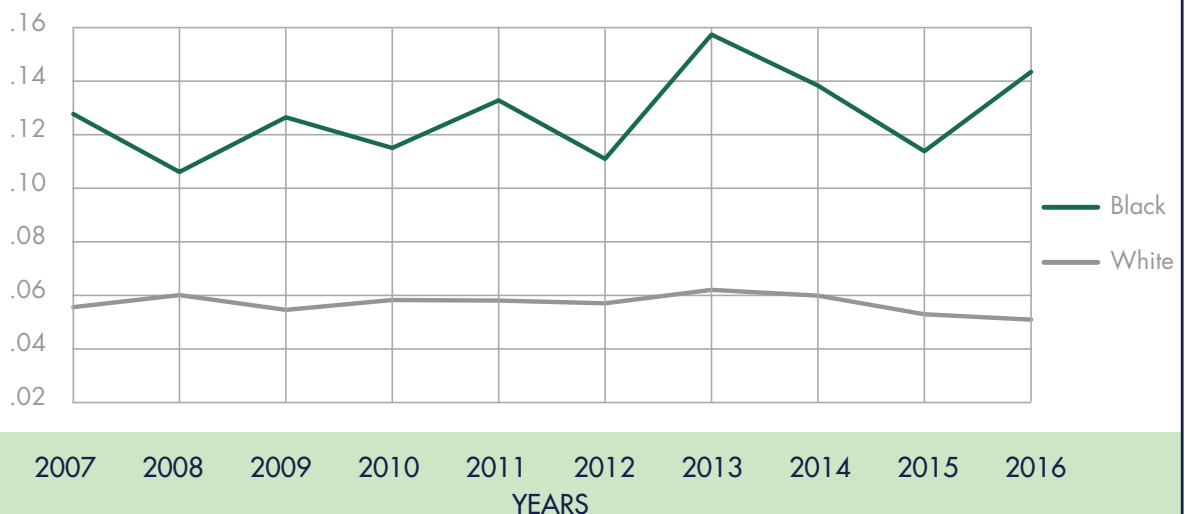
BLACK TEACHERS, PARTICULARLY BLACK MALE TEACHERS, ARE MORE LIKELY TO LEAVE THEIR SCHOOLS THAN WHITE TEACHERS. HOWEVER, THEY GENERALLY MOVE TO DIFFERENT SCHOOLS WITHIN THE SAME DISTRICT RATHER THAN LEAVE THE PROFESSION ALTOGETHER.

As in other states, Black teachers in Tennessee have substantially higher turnover rates than their White colleagues (Ingersoll & May, 2016). However, when Black teachers leave their schools, it is not because they are exiting the profession at a higher rate than White teachers—as research in other states has found—but rather that they tend to more frequently move to another school in their same district. In fact, compared to White teachers, **Black teachers are more than twice as likely to transfer schools when they turn over, while the likelihood of leaving the public education workforce entirely for both groups is roughly the same.** These higher transfer rates may be partially explained by the tendency of Black teachers to work in larger, more urban school districts, which present more opportunities for intra-district transfer.

Importantly, this finding challenges a conventional notion that lack of diversity in the profession is due to teachers of color leaving the profession at higher rates than White teachers. Similar exit rates mean that the growing racial gap between students and teachers may have more to do with lower proportions of teachers of color entering the profession than failure to retain those teachers once they enter.

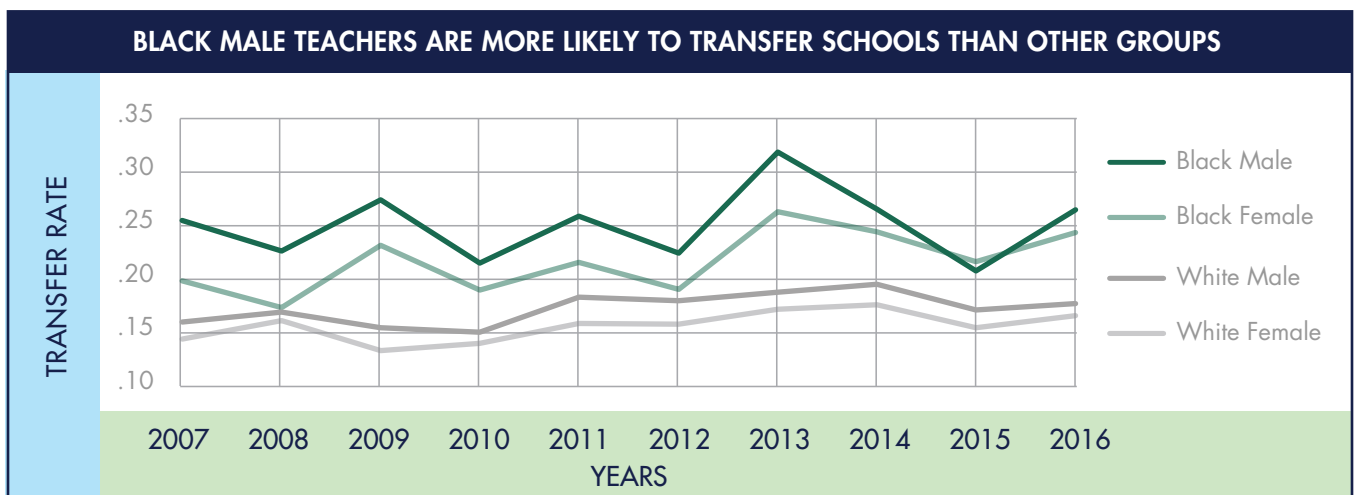
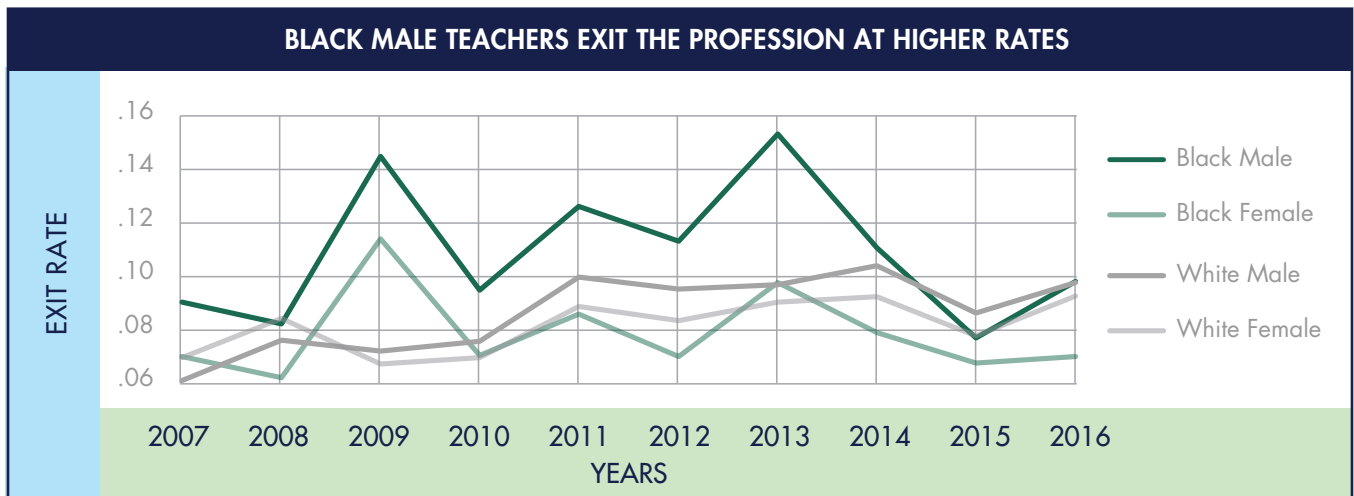
BLACK TEACHERS ARE MORE LIKELY TO TRANSFER TO ANOTHER SCHOOL WITHIN THEIR SCHOOL DISTRICT THAN WHITE TEACHERS

WITHIN-DISTRICT TRANSFER RATE





Further, it is important to examine the intersection between race and sex in analyzing teacher turnover in Tennessee. Among both Black and White teachers, men turn over at higher rates than women, but sex differences are particularly large for Black teachers. Among the four race-sex groups, **Black male teachers left the profession at the highest rates in nearly every year of our data. They are also the most likely to transfer schools.**



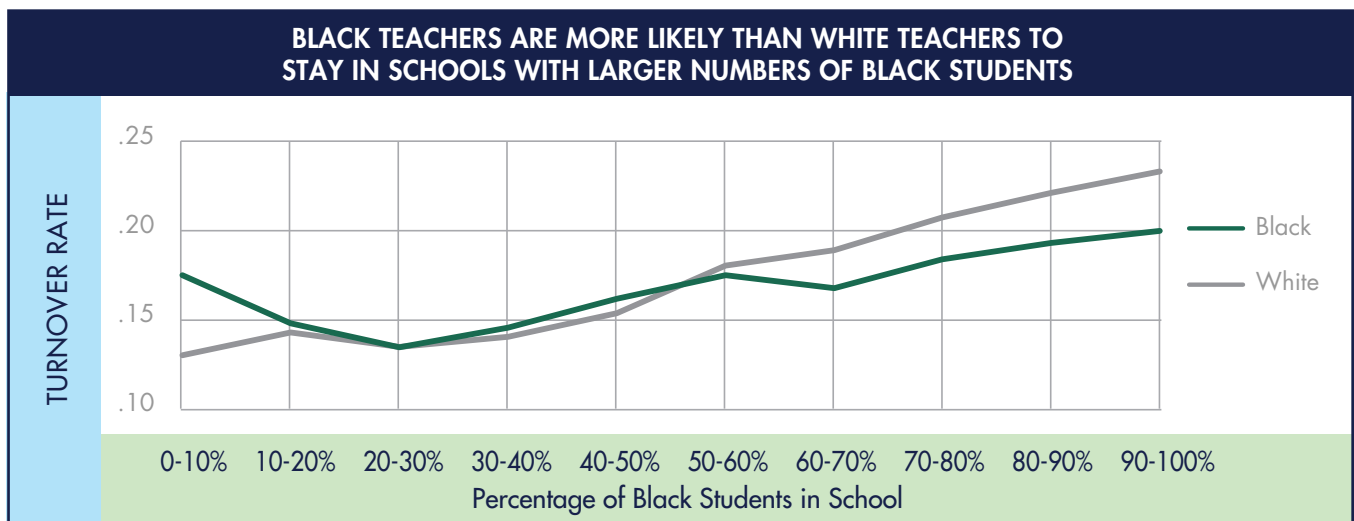
2

SOME OF THE BLACK AND WHITE DIFFERENCES IN TEACHER TURNOVER RATES CAN BE EXPLAINED BY DIFFERENCES IN THE SCHOOL ENVIRONMENTS IN WHICH BLACK AND WHITE TEACHERS WORK.

Prior research shows that schools with lower achievement and higher numbers of low-income students tend to have higher rates of teacher turnover (Clotfelter, Ladd & Vigdor, 2007). These schools often have other characteristics, such as resource challenges, less effective leadership, and lower community engagement, that make teacher working conditions tougher (Johnson, Kraft, & Papay, 2012; Grissom, 2011; Loeb, Darling-Hammond, & Luczak, 2005). We find that Black teachers in Tennessee are more likely to work in these types of schools.

Approximately 75 percent of Black teachers in Tennessee work in urban schools where there are greater concentrations of poverty and lower student achievement, compared to only 25 percent of White teachers. Even among teachers with similar personal characteristics, such as age, experience, and educational attainment, White teachers in Tennessee tend to work in schools where students perform better than the state average on annual testing (around the 60th percentile) while Black teachers often work in schools where students score below the state average (around the 25th percentile).

Our findings also show that teachers are responsive to the specific contexts of the schools where they work. Notably, Black and White teachers are differentially responsive to their school contexts. At schools with higher proportions of Black students, Black teachers turn over at lower rates than their White peers. When we control for other school characteristics as well, turnover rates for Black teachers decrease in schools with larger numbers of Black students.

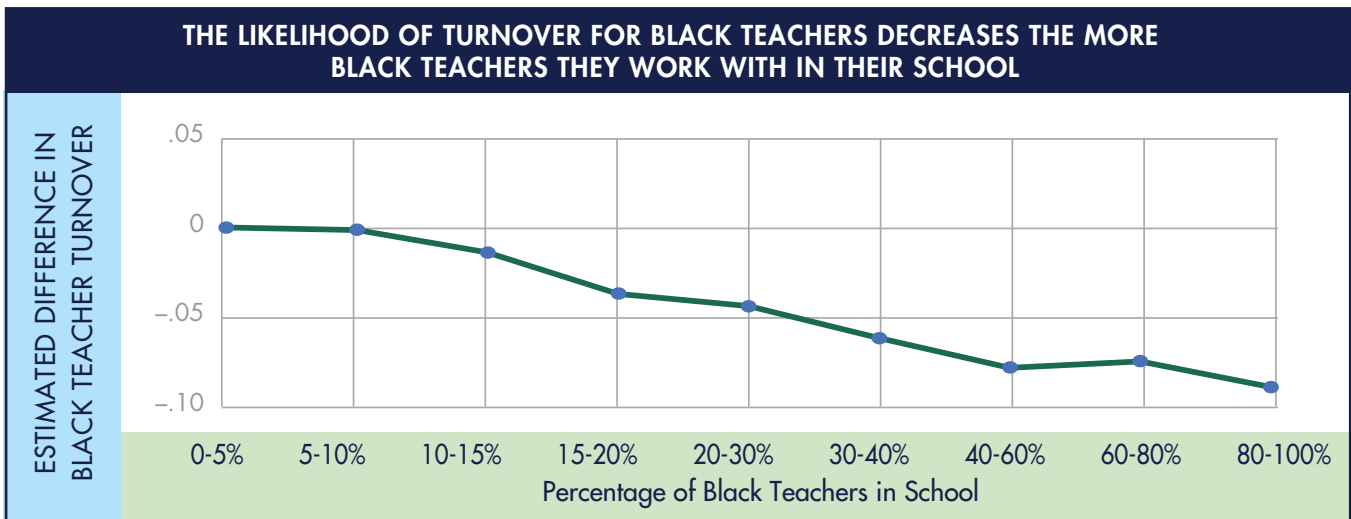




3

TURNOVER AMONG BLACK TEACHERS IS ESPECIALLY HIGH WHEN THEY ARE RACIALLY ISOLATED. BLACK TEACHERS TURN OVER AT HIGHER RATES WHEN THEY HAVE FEW BLACK TEACHERS AS COLLEAGUES.

Black and White teachers' likelihood of turning over also changes with the racial composition of their teacher colleagues. In particular, after taking into account differences in teacher characteristics and school context, the probability of turnover for Black teachers decreases as the proportion of Black teachers in the school increases. When we look at Black teachers over their careers, we see that they are more likely to stay in schools where more Black colleagues surround them.³ For instance, a given Black teacher is, on average, nearly 9 percentage points less likely to turn over when working in a school in which more than 80 percent of her colleagues are Black than in a school in which less than 5 percent of her colleagues are Black.



³ This is a plot of regression coefficients based on a model of teacher turnover that compares turnover likelihoods within the same teacher at different points in time. Each dot represents the marginal change in the probability of Black teacher turnover relative to the baseline category, which is a school with 0-5% Black teachers.



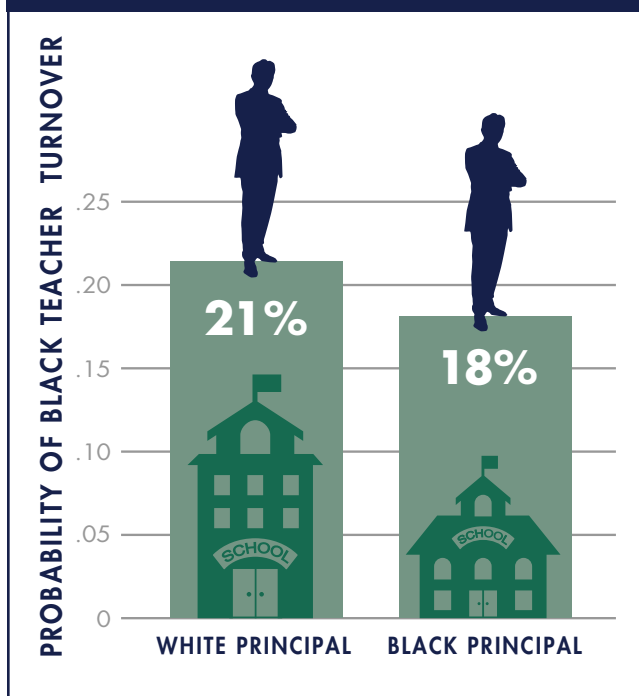
4

BLACK PRINCIPALS RETAIN BLACK TEACHERS AT HIGHER RATES.

Finally, we find that principal race directly impacts the racial composition of teachers across schools in Tennessee. Statistically, we can make comparisons among Black and White teachers in the same schools over time when the principal’s race varied, taking into account characteristics of the students they teach and other factors that may affect turnover decisions. We find that having a “racial match” with one’s principal lowers the typical teacher’s turnover likelihood by 3.2 percentage points, or about 19 percent of the average rate. This effect of teacher-principal racial match is related primarily to reductions in the probability that a teacher transfers to another school; we do not find impacts on exits.

When we break these results down by teacher race, we find that the patterns are driven by lower turnover rates for Black teachers who work for Black principals, as compared to when they work for White principals. Additionally, the data show that Black teachers who transfer out of a school led by a White principal are somewhat more likely to move to a school with a Black principal.⁴

BLACK TEACHERS ARE LESS LIKELY TO TURN OVER WHEN THEY WORK UNDER A BLACK PRINCIPAL



⁴ Analysis performed in this section can be found in Grissom, J.A., Bartanen, B., (2018). School Principal Race and the Hiring and Retention of Racially Diverse Teachers. Tennessee Education Research Alliance Working Paper.

The researchers analyzed administrative personnel records provided by the Tennessee Department of Education for the years 2002-2016. They predict the probability that a given teacher in given school in a given year turned over as a function of fixed characteristics of the teacher, school, and principal, as well as time-varying characteristics of the school and principal. They further estimate the probability of each category of turnover including exits, transfers, and position changes.

SUMMARY AND IMPLICATIONS



Amidst growing national and local discussion of the importance of educator diversity, we explore the differences in teacher turnover rates among White and Black teachers in Tennessee. **Our analysis finds that Black teachers in Tennessee are no more likely to exit the teaching profession than their White peers. Indeed, it is more common that Black teachers leave their schools and transfer to a different school within their same school district and that it appears those decisions are based in part on the characteristics of the school, including student and faculty composition.** Since Black teachers are more likely to teach in high-poverty and low-achieving schools, high transfer rates are particularly problematic as research shows that teacher turnover is especially harmful for students in these schools (Ronfeldt, Loeb, & Wykoff, 2013).

Our findings have important policy implications for Tennessee. The increased rate of within-district transfers among Black teachers highlights the need for policies and resources aimed at promoting teacher retention. Given the effect of school leadership on the racial composition of teachers, principal training and preparation programs could incorporate more training and discussion specific to hiring and supporting teachers of color. Further, providing avenues, such as affinity groups, for teachers of color to openly discuss important issues related to race and identity with other teachers who

feel similarly may combat feelings of isolation within school buildings.

Additionally, if one of the state's goals is to increase teacher diversity, knowing that the rate of attrition among Black teachers is roughly equal to that of White teachers means that the state and districts should focus more clearly on recruitment of teachers of color into the profession. Specifically, focusing recruitment efforts on building increasingly diverse teaching communities within individual school buildings may help attract more teachers of color given that teachers of color are less likely to leave if there are more teachers of color in their building. TERA research to come will explore current pipelines that draw in teachers of color in hopes of unpacking what strategies may be helpful in recruiting more teachers of color into the profession.

Focusing recruitment efforts on building increasingly diverse teaching communities within individual school buildings may help attract more teachers of color given that teachers of color are less likely to leave if there are more teachers of color in their building.

REFERENCES

Clotfelter, C.T., Ladd, H.F., & Vigdor, J.L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26(6), 673-682.

Collins, E. (2018). *Teacher and administrator racial and ethnic diversity in Tennessee*. Tennessee Department of Education. Retrieved from https://www.tn.gov/content/dam/tn/education/reports/rpt_teacher_admin_diversity.pdf

Egalite, A. J., Kisida, B., & Winters, M. A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review*, 45, 44-52.

Gershenson, S., Holt, S. B., & Papageorge, N. W. (2016). Who believes in me? The effect of student-teacher demographic match on teacher expectations. *Economics of Education Review*, 52, 209-224.

Grissom, J.A. (2011). Can good principals keep teachers in disadvantaged schools? Linking principal effectiveness to teacher satisfaction and turnover in hard to staff environments. *Teachers College Record*, 113(11), 2552-2585.

Grissom, J.A. & Redding, C. (2016). Discretion and disproportionality: Explaining the underrepresentation of high-achieving students of color in gifted programs. *AERA Open*, 2(1), 1-25.

Ingersoll, R.M., & May, H. (2016) *Minority teacher recruitment, employment and retention: 1987 to 2013*. Learning Policy Institute, Stanford, CA. Retrieved from https://learningpolicyinstitute.org/sites/default/files/product-files/Minority_Teacher_Recruitment_REPORT.pdf

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.

Lindsay, C. A., & Hart, C. M. (2017). Exposure to same-race teachers and student disciplinary outcomes for black students in North Carolina. *Educational Evaluation and Policy Analysis*, 0162373717693109.

Loeb, S., Darling-Hammond, L., and Luczak, J. (2005) How teacher conditions predict teacher turnover in California schools. *Peabody Journal of Education*, 80(3), 44-70.

Ronfeldt, M., Loeb, S, & Wykoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal*, 50(1), 4-36.

