RACIAL DIFFERENCES IN STUDENT ACCESS TO HIGH-QUALITY TEACHERS

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Abstract

Access to high-quality teachers in K–12 schools differs systematically by racial group. This policy brief reviews the academic research documenting these differences and the labor market forces and segregation patterns that solidify them. It also presents new analysis of differential exposure in North Carolina of white, black, and Hispanic students to teachers with different quality-related credentials across five grade–subject combinations. White students are most often in classrooms taught by teachers with strong credentials and least often by those with weak credentials, not only across the state as a whole, but also within most of the state's counties, especially those whose schools are most segregated by race. To address such disparities, decision makers at all three levels—state, district, and school—have various policy options to consider, with each level having an important role to play.

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INTRODUCTION

A troubling finding of past research is that various groups of students differ systematically in their access to high-quality teachers. The forces that lead to these differences lie in the workings of the teacher labor market and the segregation that characterizes schools and neighborhoods in this country. The differences matter because teachers are central to the educational outcomes of students. This policy brief reviews relevant studies, presents new evidence of disparities by race in access to high-quality teachers, and discusses policy options to address this inequity.

THE STATE OF THE LITERATURE

Three strands of academic research are relevant to the study of racial disparities in access to high-quality teachers. In the first, numerous studies have documented the disparities themselves and their educational consequences. Whether teacher quality is identified by teacher characteristics—such as years of experience or licensure test scores—or by a teacher's calculated value-added to student achievement, most studies show that white and affluent students end up with the higher-quality teachers at various grade levels (Lankford et al. 2002; Clotfelter et al. 2005; Glazerman and Max 2011; Sass et al. 2012; Goldhaber et al. 2018; Hanselman 2019; Cardichon et al. 2020; Bastian 2021; Mehrotra et al. 2021; Isenberg et al. 2022). An exception is Mansfield (2015), who concludes that high school teachers in North Carolina were fairly evenly distributed across and within schools based on a longitudinal dataset ending in 2007. Moreover, the literature shows that disparities in teacher quality can be consequential for student outcomes. For example, experienced teachers are consistently shown to be more effective in raising the achievement of their students than are novice teachers (see, e.g., Clotfelter et al. 2006; Henry et al. 2012; Ladd and Sorenson 2017).

A second strand of literature documents the racial segregation of schools. Segregation between schools is relevant because racial disparities in access to high-quality teachers between schools and districts simply could not exist if schools were not segregated. The extent of such segregation has been extensively examined (e.g., Coleman et al. 1966; Orfield and Gordon 2001; Clotfelter et al. 2008). Segregation inside schools—and its companion practice of academic tracking—makes possible disparities within schools (see Useem 1992; Lucas and Berends 2007; Kalogrides and Loeb 2013; Kalogrides, Loeb and Be'teille 2013; Grissom and Redding 2016; Clotfelter et al. 2021).

The third strand of literature relevant to racial disparities in access to quality teachers concerns the labor market for teachers and associated patterns of mobility and attrition. An essential element is an understanding of the factors that influence teachers' decisions to change schools, stay where they are, or leave teaching altogether. These factors include salaries (like other workers, teachers typically prefer positions with higher pay), location (teachers are drawn to their hometowns and states), and characteristics of schools (teachers tend to avoid schools with certain demographic makeups). Jackson (2009, p. 214) succinctly summarizes this last factor: "if teachers prefer working environments with students of a particular demographic . . . , students whom teachers find undesirable will be exposed to teachers of lower quality." Research on teacher transfers has long documented systematic patterns correlated with the economic and racial makeup of the schools teachers leave and the ones they go to (Becker 1952; Greenberg and McCall 1974). More recent studies of teacher mobility and labor markets uncover

similar patterns (Hanushek and Rivkin 2007; Jackson 2009; Goldhaber et al. 2010; Boyd et al. 2011; Clotfelter et al. 2011; Reininger 2012; Engel et al. 2014). Such teacher quality disparities result from the combined effects of attrition, mobility between positions, and hiring for open positions (Goldhaber et al. 2022). One question of particular relevance for the subject at hand is the potential for higher salaries to offset teachers' aversion to schools serving large proportions of disadvantaged students. Yet, as shown by Clotfelter et al. (2011), teachers with strong credentials are less responsive to salary differences than teachers with weaker qualifications.

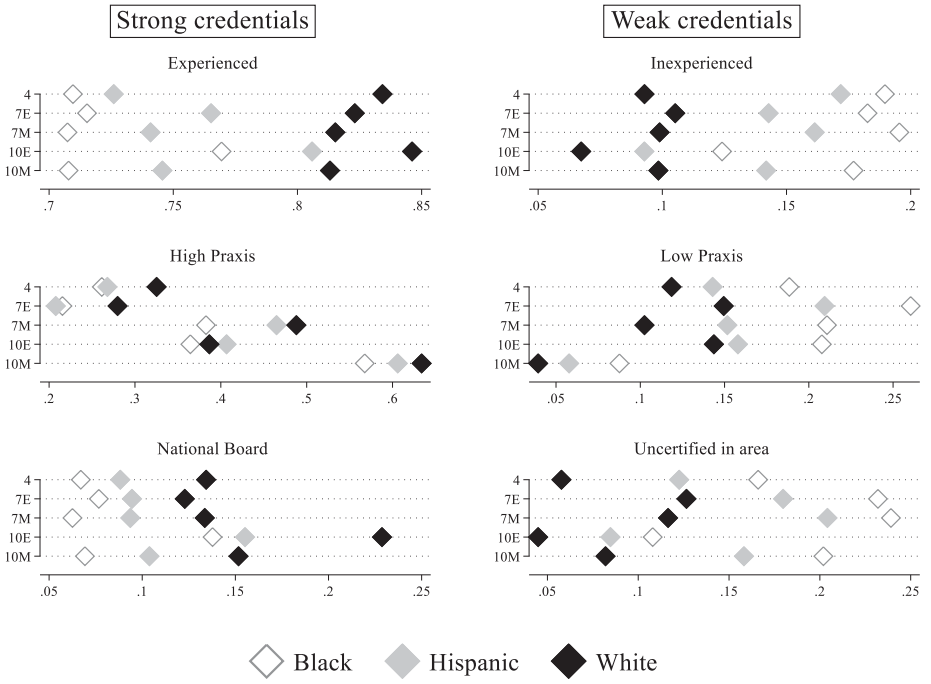
Taken together, these three strands of research reveal that disparities in access to quality teachers are baked into conditions and practices that are common in public education, segregation creates racial and economic differences both between and within schools, and the fluid teacher labor market allows teachers to transfer from one school to another, usually with no change in salary. This freedom of movement, combined with prevailing preferences of teachers, as well as decisions about the allocation of teachers within schools, paves the way for the disparities in access we observe.

DATA AND METHOD

We performed new empirical work with the aim of determining whether student access to high-quality teachers differs by the race or ethnicity of the students. To do so, we assembled detailed administrative data for the year 2019 for the state of North Carolina that link student and teacher characteristics, categorizing these assignments by grade and subject. To represent schools and subjects at the elementary, middle, and high school levels, we examine five sets of grade–subjects in the state's traditional public schools: fourth grade, seventh-grade English, seventh-grade math, tenth-grade English, and tenth-grade math.[1] We used counties as the relevant local geographic unit because most school districts in the state are countywide and the state's one hundred counties are quite large and best represent the relevant geographic area of school choice and the local teacher labor market.

For each teacher, we use information on years of experience, certification area, National Board Certification, and teacher licensure test scores.[2] To represent teacher quality, we defined six dichotomous measures, three indicating strong teacher credentials and three indicating weak credentials. The indicators of strong credentials were: *experienced* (five or more years of teaching experience), *high licensure test score* (a score on the Praxis 1 teacher test in the top quartile of all teachers in the state), and *National Board Certification*.[3] The indicators of weak credentials were: *inexperienced* (two or fewer years teaching experience), *low teacher test score* (a score on the Praxis 1 test in the bottom

1. See appendix A, available in a separate online appendix that can be accessed on *Education Finance and Policy*'s Web site at https://doi.org/10.1162/edfp_a_00402, for a description of our method.
2. Previous research has documented that these credentials are associated with student achievement in the North Carolina context. See, for example, Clotfelter, Ladd, and Vigdor (2006) and Ladd and Sorensen (2017). For a more general discussion of teacher credentials, see Goldhaber (2015).
3. *Uncertified in field* includes teachers without any license or certified but not in their assigned teaching area. Fourth-grade teachers are counted as "high Praxis" if they have at least one top quartile Praxis 1 score (reading or math) and "low Praxis" if all of their Praxis scores are in the bottom quartile. Information on teachers is based on the North Carolina Education Research Center datasets: Licensure-Salary Pay Snapshots, Licensure-Salary Test Snapshots, Licensure Snapshots, and National Board Certification. Standardization of Praxis scores was performed for the year in which a teacher took the test.



Notes: The figure shows the share of students by race/ethnicity in each of five grade–subject categories who had teachers with various characteristics. These characteristics are defined as follows: Experienced = five or more years of teaching experience; High Praxis = a score in the top quartile in the statewide Praxis 1 score distribution; National Board = National Board certified; Inexperienced = two or fewer years of teaching experience; Low Praxis = a score in the bottom quartile in the statewide Praxis 1 score distribution; Uncertified in area = no certification or not certified in area of teaching assignment.
Source: North Carolina Education Research Data Center: Course Membership, Licensure-Salary Pay Snapshots, Licensure-Salary Test Snapshots, Licensure Snapshots, and National Board Certification.

Figure 1. Average Exposure to Teachers with Strong and Weak Credentials, by Students' Race/Ethnicity, 2019

quartile of all teachers in the state), and *not certified* in the area of teaching. For each credential, we measured the probability that a white, black, or Hispanic student was assigned to a teacher with each of these credentials. Then, for each of our six indicators of teacher quality, we compare these probabilities across student racial or ethnic groups.

FINDINGS

Our statewide findings are summarized in figure 1, which shows the average exposure rates of students to teachers possessing each credential or characteristic. For each of our six measures and each of the five grade–subject levels, the three indicators show the average statewide exposure rates for white, black, and Hispanic students. For example, the first panel shows that 82 percent of white students in seventh-grade math had teachers with five or more years of experience, compared with only 71 percent of black students and 74 percent of Hispanic students. The panel also shows that white students at the other four grade–subject levels similarly had the highest exposure rates to experienced teachers.[4] Indeed, the figure makes very clear that white students were

4. We note that the figure shows that for some grade–subject categories, particularly seventh- and tenth-grade math, the percentages of students assigned to high-Praxis teachers exceed 25 percent. That most likely reflects

more likely than black students to be assigned to teachers with strong credentials across grades and subjects. Black students, by contrast, were most likely to have teachers with weak credentials and least likely to have teachers with strong credentials. In most cases, the exposure rates of Hispanic students were between those of the white and black students. This figure is a striking illustration of racial and ethnic disparities in access to teacher quality in North Carolina's traditional public schools.

To see whether these statewide racial disparities are widespread or are simply due to differences in just a few communities, we performed similar comparisons for each of the state's one hundred counties. For an overwhelming majority of counties, we found patterns similar to the statewide patterns displayed in figure 1. To illustrate the prevalence of these disparities, we sorted counties into twenty groups according to their level of between-school segregation (measured by a dissimilarity index), separately for both white–black and white–Hispanic segregation, and calculated the mean difference in exposure to experienced teachers between white and black or Hispanic students within each county group. In the group with the greatest average segregation, for example, white students had an average exposure rate to experienced teachers that was 0.15 (15 percentage points) higher than that for black students. That difference in exposure is shown as the last point to the right in the scatterplot in figure 2, denoted white–black. We also calculated mean student enrollment for each group, defined as the average total number of black, Hispanic, and white students. Within figure 2, larger markers indicate greater average enrollment. We see that larger counties generally have higher levels of segregation and greater racial disparities in access to experienced teachers.

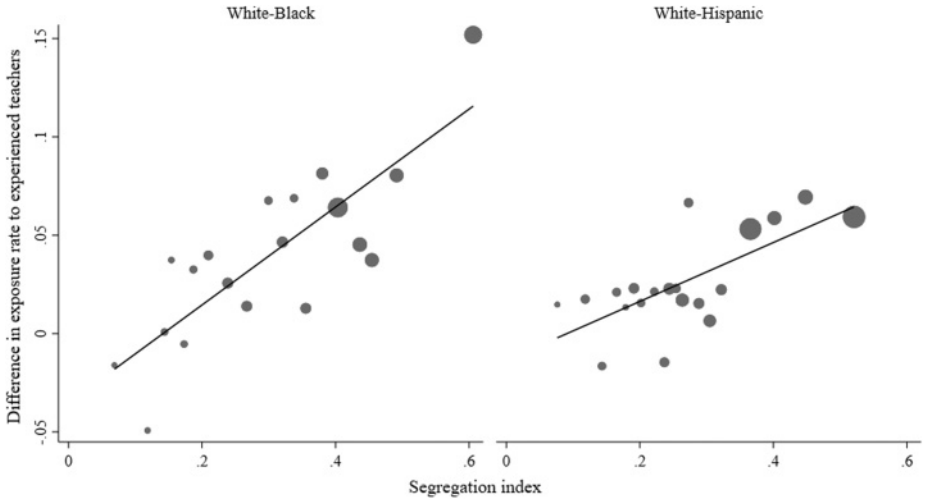
Taken together, the scatterplots in figure 2 reveal two noteworthy findings. First, differences by race and ethnicity in exposure to experienced teachers are common across the state, with most county groups revealing a higher exposure rate for white students. Second is that, on average, these differences are larger in counties where schools are more racially segregated.

Although figure 2 is based on only one of our measures of teacher credentials, the use of other measures yielded similar findings. That is, we found similar patterns in scatterplots based on our two other measures of strong teacher credentials and opposite patterns based on our three measures of weak credentials. We conclude that white students across the state are more likely to have teachers with strong characteristics and less likely to have teachers with weak characteristics, especially in larger, more segregated counties.

DECOMPOSING THE RACIAL DISPARITIES

To shed light on which public policies might be effective in reducing the systematic and pervasive racial disparities documented here, it would be useful to know the extent to which the statewide disparities at each grade–subject level are attributable to disparities across counties, across schools within counties, or across classrooms within schools. As noted above, since most school districts are countywide in North Carolina, the most logical local unit is the county. For other states, the comparable local units might instead be local school districts, many of which may be quite small. In any case, the greater is the

the selection of teachers with high math test scores into those courses. Additional analysis not shown suggests that teachers with high Praxis scores tend to teach more students than those with lower Praxis scores.



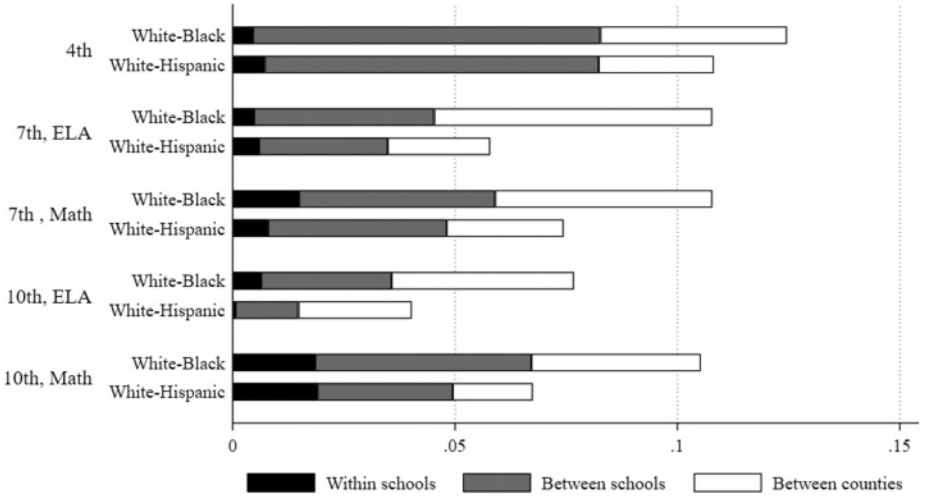
Notes: Each point on the graphs indicates the average for five counties in the difference in exposure rates to experienced teachers (those with five or more years of experience), where counties are grouped according to their between-school segregation measured by a dissimilarity index. The size of points is proportional to average total enrollment of white, black, and Hispanic students in the five counties. On the left graph (denoted White—Black), the differences in exposure to experienced teachers and measured school segregation are based on white-black differences. Each county group's average is calculated over the five grade-subject levels described in the text. Positive values on the y-axis indicate that white students had a higher average exposure rate to experienced teachers than black students in that group of counties. The dissimilarity index is based on between-school disparities of white and black students. Missing from the graph is one bin of very small counties with very few black students, for which the dissimilarity index would be zero. The scatterplot on the right graph (denoted White—Hispanic) shows the corresponding differences in average exposure rate to experienced teachers between white and Hispanic students, again combined into groups of five counties each. For that graph, segregation is measured by the dissimilarity index based on between-school disparities of white and Hispanic students.
Source: North Carolina Education Research Data Center: Course Membership, Licensure-Salary Pay Snapshots, Licensure-Salary Test Snapshots, Licensure Snapshots, and National Board Certification.

Figure 2. Scatterplots of the Difference in Average Exposure to Experienced Teachers, White—Black and White—Hispanic, by Groups of Counties Sorted by Segregation

contribution of gaps across local educational units to gaps in overall teacher quality, the stronger is the argument for state-level policies to reduce them. In contrast, significant contributions to the statewide gaps of differences across schools within counties or across classrooms within schools would suggest the need for policy interventions at the local or school level.

To this end, we decomposed the statewide racial gaps in exposure to one of our measures of teacher quality, namely, teachers with at least five years of experience. Figure 3 illustrates this decomposition for each of our racial disparity measures for each of our five grade–subject categories.[5] The length of each bar equals the gap in exposure to experienced teachers that is shown on the corresponding line in the first panel of figure 1. Segments of each bar show the portion of each gap that can be attributed to disparities within schools, between schools, and between counties. For example, consider the bar for seventh-grade math labeled white–black. Consistent with figure 1, the total length of the bar (0.108) corresponds to the difference between the 0.815 exposure rate for white

5. The decomposition is calculated based on the actual exposure rate of a specific group of students to experienced teachers and two hypothetical exposure rates: the group's exposure rate assuming there were no disparities across classrooms within schools and its exposure rate assuming there were no disparities across schools within counties. See online appendix B for a more detailed explanation of the decomposition method.



Notes: Length of each bar represents the total gap in exposure to experienced teachers (those with five or more years of experience) between white students and either black or Hispanic students at each grade/subject level (separately for white/black gaps and white/Hispanic gaps). For seventh grade math students, for example, the proportion of white students who had experienced teachers was 0.815, and the proportion of black students who had experienced teachers was 0.707, leaving a gap of 0.108. Segments of each bar show the portion of each gap attributable to disparities within schools, between schools, and between counties. See text and online appendix B.

Source: North Carolina Education Research Data Center, Course Membership the North Carolina Education Research Center data sets: Licensure-Salary Pay Snapshots, Licensure-Salary Test Snapshots, Licensure Snapshots, and National Board Certification; authors' calculations.

Figure 3. Decomposition of Racial/Ethnic Gaps in Exposure to Experienced Teachers, 2019

students and the 0.707 exposure rate for black students. Similarly, the length of the white–Hispanic bar (0.074) corresponds to the difference between the 0.815 exposure rate for white students and the 0.741 exposure rate for Hispanic students.

The three segments of each bar represent the portions of each overall racial gap that are attributable to the three mechanisms. For example, for seventh-grade math, 0.015 (1.5 percentage points) of the white–black gap can be attributed to differences across classrooms within schools, 0.044 to differences between schools within counties, and 0.049 to differences between counties. The (somewhat smaller) gap in exposure between white and Hispanic students primarily reflects disparities between schools, and secondarily reflects disparities across counties.

Based on the decompositions shown in figure 3, we draw the following conclusions. First, except for seventh- and tenth-grade math, differences across classrooms within schools contribute relatively little to the overall magnitude of teacher quality differentials. As a consequence, while efforts by school principals to redistribute their teachers and students across classrooms within schools might well be beneficial in some cases, a stronger case can be made for reducing teacher quality gaps with policy actions at the state or countywide level.

Second, the contributions of the other components differ by grade and subject. The figure shows that the largest contributor (about two thirds) to disparities in grade 4 is differences between schools within counties. In grades 7 and 10, the racial gaps are mainly attributable to a combination of disparities between schools within counties and

disparities between counties. This pattern reflects a combination of factors, such as differences in the racial compositions of individual counties, racial and economic segregation across schools within counties, and other differences, such as teacher salaries and local living and working conditions, which affect the ability of counties or schools to attract and retain high-quality teachers. Much of the responsibility for reducing disparities of these types would lie with policy makers at both the state and county levels. In addition, the disparities across classrooms within schools that emerge most clearly for seventh- and tenth-grade math would require actions by school-level administrators.[6]

POLICY OPTIONS

We note that the state government plays a larger role in education finance and policy making in North Carolina than in many other states. In particular, the state government provides 63 percent of total (including federal) K–12 revenue and sets and pays for salaries based on a statewide teacher salary schedule, albeit one that individual counties can supplement out of local tax revenues. Although state-level policy makers in North Carolina may have the authority and power to play a somewhat larger policy role in offsetting racial disparities than their counterparts in many other states, all state governments have significant educational responsibilities. At the same time, education policy makers at local and school levels in every state also have significant roles to play.

State-Level Policies

Central to the state role is its responsibility for ensuring an adequate total supply of high-quality teachers. To that end, states must invest continually in teacher preparation programs and provide salaries sufficient to make teaching a rewarding and desirable profession. Given that teachers often avoid schools with certain demographic makeups, a shortfall in the overall supply of qualified teachers is likely to be particularly detrimental to students in these schools.

Policies to Reduce Teacher Gaps in Certain Subject Areas

Shortfalls of teachers in certain content areas also contribute to racial gaps in access to high-quality teachers. To address that issue, state policy makers can provide fellowships for potential teachers who commit to teaching in content areas, such as math, science, and special education, which are often hard to fill. The relatively small North Carolina Teaching Fellows program, which operated successfully from 1986 to 2011, has shown the potential of a statewide program of this type to recruit highly qualified and effective teachers who remain in the profession longer than other teachers. Because the program placed no limitations on where they taught, however, the Fellows ended up clustered in metropolitan areas rather than in schools and classrooms with high-poverty and lower-performing students (Henry et al. 2012). Hence, some limitations on their placement, perhaps with additional financial incentives for Fellows to teach in underserved schools, would have been useful. That program was reinstated in 2018–19, and the state is now considering greatly increasing the number of Fellows and expanding the number of eligible teacher training programs to cover all regions of the state

6. The importance of within-school teacher quality gaps for tenth-grade math parallels our findings related to classroom-level segregation (Clotfelter, Ladd, Clifton, and Turaeva 2021).

and to include minority-serving universities to help increase the diversity of the work force (WestEd et al. 2019, p. 62).

Policies to Reduce Racial Gaps across Counties

In addition to pursuing policies designed to minimize statewide shortages of teachers, state policy makers must also pursue policies designed to offset the greater disadvantages that some counties face relative to other counties in attracting high-quality teachers. For example, using North Carolina again as an example, under that state's teacher salary policy, poor or low-wealth counties, and especially those in rural areas, are at a disadvantage relative to wealthier urban counties who have the means and the desire to supplement the statewide salary schedule. Except to the extent that local salary supplements simply compensate teachers for differences in the cost of living, they add to the host of attractions offered by urban areas, giving wealthier counties a decided edge in attracting and retaining good teachers. In addition, potential teachers, especially those who grew up in more vibrant urban areas, may prefer to avoid counties lacking sufficient suitable housing, far removed from urban centers, or serving primarily disadvantaged students.

State funding for higher salaries in such areas, along with programs to provide housing and other supports for teachers, represent sensible policy options. In addition, fellowships similar to those just described for certain content areas could be targeted specifically toward prospective teachers who commit to teaching in geographically underserved areas. "Grow-your-own" strategies for teachers are also worth considering. Of note, many states are now trying innovative approaches to help train local community members—including career changers, paraprofessionals, or staff currently working in schools—to become teachers. The goal is to help local communities (often in partnership with local community colleges) to produce teachers who understand their local communities and are willing to remain there (Espinoza et al. 2018; see also WestEd et al. 2019, p. 65.).

Local Government Policies to Reduce Racial Gaps between Schools within Counties

Policy makers at the county level have the primary, but not necessarily the exclusive, responsibility for reducing racial teacher quality gaps arising from differences across schools within local counties. Given the well-documented tendency for teacher mobility between schools to be correlated with the socioeconomic and racial composition of students, the racial mix of students in a school can affect where teachers end up and who they teach.

Reducing the Racial Segregation of Schools

Therefore, the most obvious way to reduce racial differences in access to high-quality teachers across individual local schools, but one that has often proven difficult to implement, would be for policy makers to reduce the extent to which schools are racially segregated. If all schools within a county had the same racial mix of students, there could be no school-specific differences in student access to high-quality teachers. Reducing school segregation across elementary schools may be particularly difficult because of the positive value many parents place on having elementary schools that serve

local neighborhoods, even if those local neighborhoods are racially segregated. Reducing school segregation at any level would typically require the county to redraw school attendance zones or to pursue policies to reduce residential segregation. Making that remedy all the more difficult is the possibility that some local residents may respond to such changes in ways that could undermine desegregation efforts. These responses may include moving out of the county, transferring their children in other schools within the county, enrolling them in charter schools (Mickelson et al. 2018), or expressing their opposition by voting out the current school committee. On a more positive note, a recent event study of a controlled choice program in Wake County, North Carolina, that reassigned about 25 percent of students suggested that carefully designed school assignment policies can improve school diversity (Domina et al. 2021).

Reducing Differences in the Mix of Teachers across Schools

An alternative or complementary approach would be to take steps to reduce the clustering of high-quality teachers in some schools and low-quality teachers in other schools, a pattern that, as previous studies of teacher mobility make clear, typically works to the disadvantage of schools serving large shares of students of color. One potential step would be for state or district policy makers to eliminate the fairly standard practice of giving preference to experienced teachers who wish to move from one school to another when filling teacher openings within the county. State or county policy makers might also try boosting salaries for experienced teachers willing to teach in schools serving large proportions of disadvantaged or minority students. As documented by Clotfelter et al. (2011), however, the pay differential required to induce teachers with strong qualifications to move to or remain in such schools is likely to be quite high. The reason is that, compared with relatively less-qualified teachers, teachers with strong qualifications tend to be less willing to teach in such schools and to be less responsive to salary differentials.

At the same time, changing the quality of new recruits into schools serving large proportions of disadvantaged students may not suffice. Also needed are strategies to increase the productivity of all teachers and to promote the retention of the effective teachers already in such schools (Sass et al. 2012; Xu et al. 2015). Hence, a final strategy would be for state or local policy makers to increase mentoring support for inexperienced or otherwise struggling teachers in high-minority schools. When done well, such mentoring can improve the quality of the mentored teachers, induce some inexperienced teachers to remain in the school and thereby to gain experience, and reduce the rates of teacher turnover. That, in turn, would reduce the need to hire new teachers, many of whom are likely to be inexperienced. Further, given the evidence that the quality of the school principal affects teachers' perceptions of their working conditions and their willingness to remain in a school (Ladd 2011) and that principal turnover increases teacher turnover (Bartenen, Grissom, and Rogers 2019), ensuring that schools serving disadvantaged students have high-quality and stable leadership would help to retain teachers in such schools.

Some policy analysts have suggested that policy makers should consider exploring changes in the institution of teacher tenure as a means of reducing racial disparities in access to quality teachers across schools (Miller and Chait 2008). The logic here would be that the difficulty of removing ineffective teachers under current due process

requirements makes it possible for ineffective teachers, many of whom are concentrated in schools with demographic characteristics often avoided by teachers, to remain in such schools. Under a different system for paying and retaining teachers, such as one based more explicitly on merit, such teachers would be easier to fire. We do not recommend such a strategy, however. Not only would it most likely end up as essentially a merit pay system for teachers, which has generated mixed results in the past, it would remove an important, if imperfect, guard against arbitrary treatment of teachers by principals or other administrators that would have to be replaced by other safeguards.

School-Level Policies to Reduce Racial Gaps within Schools

Racial gaps in access to high-quality teachers within schools can occur only when students are distributed unevenly by race or ethnicity across a school's classrooms. Numerous studies have clearly shown the connection between academic tracking and other practices of grouping students into classrooms and various forms of within-school segregation (see, e.g., Mickelson 2001; Lucas and Berends 2007; Kalogrides and Loeb 2013; Clotfelter et al. 2021). Further, the impact of tracking can be exacerbated because of scheduling challenges that arise when students who are tracked for academic reasons into advanced classes for one subject are grouped with similar students in many of their other classes.

Limit the Use of Academic Tracking

One way to reduce tracking in subjects such as math at the high school level would be to make less use of tracking in earlier grades. If all, not just the top, students were made eligible for advanced math in middle school, for example, there would be less justification for tracking of precalculus and subsequent math classes in high school. Successful mixing of students in middle school math courses, however, would necessitate appropriate attention to support both for students and for teachers and, for that reason, might be difficult. Francis and Darity (2021) propose an alternative approach designed to reduce the effects of tracking on racial disparities within high schools. Given their empirical finding that a higher proportion of black students in upper-grade advanced high school math courses increases the probability that black students in the lower high school grades will opt for advanced math courses before they graduate, the authors suggest that a short-term concerted effort to reduce institutional biases among, for example, school counselors, that create barriers for entry into advanced courses among racialized minorities, could have long-term beneficial effects (Francis and Darity 2021). Schools could also reduce the adverse effects of tracking by limiting the number of classes that are subject to academic tracking and by striving to ensure that students who are in one tracked class are assigned to more diverse groups for other classes.

Assign the Stronger Teachers to the Students with Lower Prior Achievement

Because racialized minority students, particularly those from less advantaged backgrounds, often have lower levels of prior achievement than their more advantaged peers, an explicit policy of assigning high-quality teachers to classrooms with low prior achievement levels could reduce undesirable within-school racial disparities in exposure to high-quality teachers. One disadvantage of this approach is that it may induce some teachers to avoid the schools serving higher proportions of low-achieving

students. A modification within the context of academically tracked classes would be to ensure that all teachers within a school are systematically assigned to teach sections with students at every achievement level each year.

CONCLUDING DISCUSSION

Our finding of pervasive and substantial racial gaps in students' exposure to teachers with strong and weak credentials indicates that white students in North Carolina are more likely to be assigned to high-quality teachers than are black or Hispanic students. Notably, we find gaps in fourth grade and in both math and English courses in seventh and tenth grades. Further, we find gaps in most counties. Although our empirical analysis focuses on North Carolina, the policy implications are more general and imply that policy makers at all levels—state, district, and school—will have to confront patterns of differential access by racial group to high-quality teachers head-on and develop a variety of policy mechanisms to counter them.

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