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**TEACHER DIVERSITY AMONG RELAY
GRADUATE SCHOOL OF EDUCATION
TEACHERS: HIGHLIGHTED FINDINGS**

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EXECUTIVE SUMMARY

There is a significant mismatch between the ethnic and racial composition of the K–12 public school teacher workforce and the students it serves. For example, in 2017-18, about 16% of U.S. public school teachers were Hispanic or Black, compared to 42% of students (US Department of Education, 2019). In New York City, the demographic similarity between teachers and students is greater than the national average, but there is still a substantial mismatch. Specifically, although 63% of the student body is either Hispanic or Black, only 32% of the New York City teacher workforce is Hispanic or Black. Mismatches in race and ethnicity between teachers and students have been shown to affect student outcomes such as student achievement (Dee, 2004, 2005; Egalite, Kisida, & Winters 2015; Harbatkin, 2021; Hart, 2020), student absences and suspensions (Blazar, 2021; Blazar & Lagos, 2021; Gottfried et al., 2021; Holt & Gershenson, 2019; Lindsay & Hart, 2017; Shirrell et al., 2021), and high school graduation, and this mismatch can even have long-term effects on students' future career earnings (Gershenson et al., 2018). Reducing mismatches may therefore be a promising strategy for improving outcomes for students of color. Yet, high-quality examples of policy interventions with this aim are limited.

Non-traditional educator preparation programs, such as the Relay Graduate School of Education (Relay), may be an effective way to introduce more teachers of color into the teacher supply pipeline. Here, we report evidence using data from the New York City Department of Education (NYCDOE) to address three research questions related to reducing racial and ethnic mismatch between students and teachers:

- (1) Are teachers trained by the Relay program more racially and ethnically diverse than other novice New York City teachers?
- (2) Are students of color more likely to take courses taught by teachers of the same race when teachers are trained by Relay?
- (3) Are teacher-student racial matching effects larger among Relay teachers than other novice New York City teachers?

To answer these questions, we used longitudinal administrative data from the population of NYCDOE students in third through twelfth grade between the 2013-14 and 2018-19 school years. These data include student-teacher linkages across six school years. The longitudinal data are well-suited for the analysis because they allowed us to employ statistical models that control for the effects of students, schools, grades, and years, which aided in accounting for non-random sorting of students to teachers. Using student fixed-effects models, which are commonly used in racial matching studies, we provide evidence for each question.

RQ 1: ARE RELAY TEACHERS MORE DIVERSE?

Although the overall teacher workforce in New York City became more racially diverse between 2014 and 2018, the diversity of first-year teachers from Relay increased faster relative to other new teachers. For example, the share of Hispanic or Black teachers from Relay increased from 31% in 2014 to 54% in 2018, versus 32% to 38% percent among non-

Relay teachers. We also found evidence that first-year Relay teachers were less likely to be White females and more likely to be Black males compared to first-year non-Relay teachers. The improved racial and gender diversity persisted over the first four years of teachers' careers for White female and Black female teachers (though not for other subgroups), suggesting that Black female Relay teachers could be more likely to remain in teaching than Black female non-Relay teachers.

Because 25% of Relay teachers are first-year special education teachers (compared to 16% of non-Relay teachers), we also examined whether Relay-trained special education teachers were more likely to be teachers of color than non-Relay teachers. We found that special education teachers trained by Relay were less likely to be White females and more likely to be Black females and Asian females than special education non-Relay teachers.

RQ 2: ARE STUDENTS OF COLOR MORE LIKELY TO TAKE COURSES TAUGHT BY SAME-RACE TEACHERS WHEN THE TEACHERS ARE TRAINED BY RELAY?

We found that the Relay program increased the likelihood of racial matching between students of color and teachers. For example, Black and Asian students are 3 percentage points more likely to be taught by Black and Asian teachers if teachers are trained by the Relay program, something that is driven largely by high school students. Although this is a small increase, given the base likelihood of racial matching for Black students is 30%, this represents a 10% increase for Black high school students—which translates into roughly 30,000 additional Black students taught by Black teachers in high school in New York City.

Given that Relay teachers are more racially diverse, we also explored whether students of all races and ethnicities are more likely to take courses taught by Relay teachers of color. When we examined the extent to which the Relay program contributed to the diversification of teacher race and ethnicity in classrooms, results showed that all students, regardless of their race, were more likely to be taught by Black Relay teachers than Black non-Relay teachers. This was observed across all grade levels. We found these positive diversification effects for Asian teachers as well, but negative effects on the likelihood of being taught by Hispanic Relay teachers.

RQ 3: ARE THE TEACHER-STUDENT RACIAL MATCHING EFFECTS ON STUDENT OUTCOMES LARGER AMONG RELAY TEACHERS?

Consistent with the literature, we found that same-race teachers have positive effects on absences and suspensions, particularly for Black students. We also found that these same teacher-student race effects were larger for Relay teachers than non-Relay teachers. For example, there was a 7 percentage point decrease in the likelihood of being suspended for Black students who were fully exposed to same-race Relay teachers, whereas there was only a 2 percentage point decrease for non-Relay teachers. Because hiring *only* Black Relay teachers is unrealistic across all of NYC, we estimated the effect of hiring two Black Relay teachers

within a school to put the estimate in perspective: This translates to decreasing the total number of suspensions for Black students in NYC by 6,500 cases between 2014 and 2018, which is equivalent to a 12.5% decrease in the average suspension rate. We found that Relay same-race effects differ by grade level and gender. For example, Relay same-race effects for suspensions for Black students are driven largely by middle school male students, whereas Relay same-race effects on the probability of receiving any suspensions for Hispanic students are driven mainly by high school students.

Given the broad national interest in diversifying the teacher workforce, the full report discusses potential channels through which teacher diversity affects student outcomes, including three approaches to broaden our understanding about Relay same-race effects on student outcomes. Future research on this topic could explore (1) Extending the current research to teacher diversity in charter schools; (2) exploring the effects of Relay special education teachers on same race students of color who participated in an IEP; (3) assessing Relay effects on retaining teachers of color; and (4) examining the influence of different teacher pathways (e.g., Teach For America, NYC Teaching Fellows) on teacher diversity and student outcomes.

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