Recruitment and Retention of Black Educators

Promising strategies at eight U.S. teacher residencies

Naureen Madhani, Ph.D. Robert Shand, Ph.D. Kimberly Austin, Ph.D.

With

Caroline Connolly Nicholas Milinkovich Chloe O'Neill Patrice Oseni Joanna Pisacone Enioluwada Popoola







Center for Public Research and Leadership

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

Acknowledgments from NCTR

The National Center for Teacher Residencies (NCTR) would like to acknowledge the contributions of the Center for Public Research and Leadership (CPRL) for their collaboration on this report that showcases the early impact of NCTR's Black Educators Initiative (BEI).

We also would like to acknowledge NCTR staff who contributed to this report: Director of Research and Evaluation Carrie Scheib who served as the liaison and leader for this report. Kevin Levay, Associate Director of Research and Data, who provided data analysis support. Director of BEI Keilani Goggins who worked closely with CPRL staff to help them understand how NCTR administers BEI. Associate Director of Marketing and Communications Alicia Roberson who contributed to the design of the report and developed the communications strategy for disseminating it.

Special thanks to Anissa Listak, NCTR's founder and former CEO, for her visionary leadership of BEI. Special thanks are also extended to Erica Hines, NCTR's Chief Program Officer, who provided leadership to BEI in its early phases. Thank you also to Chris Lozier, NCTR's Chief Operating Officer, for his ongoing support of BEI and its grantees.

NCTR would like to thank our teacher residency partners and the teacher residents who gave of their time to participate in this evaluation. We would also like to thank our teacher residency partners for their ongoing commitment to ensuring that Black teacher residents have the support they need to be successful.

CPRL's evaluation of NCTR's BEI and this report were made possible by the very generous support of the <u>W. Clement & Jessie V. Stone Foundation</u>.

NCTR's BEI is made possible by the support of Ballmer Group.





W. Clement & Jessie V. Stone FOUNDATION





About NCTR

The National Center for Teacher Residencies (NCTR) is a nonprofit organization dedicated to developing, launching, supporting, and accelerating the impact of teacher residency programs. Headquartered in Chicago, NCTR's mission is to disrupt historical inequities by advancing the teacher residency movement to prepare effective, diverse, culturally responsive educators. For more information about NCTR, visit www.nctresidencies.org.



COLUMBIA UNIVERSITY N THE CITY OF NEW Y

About CPRL

The Center for Public Research and Leadership (CPRL) at Columbia University strives to revitalize public school systems while reinventing professional education. CPRL conducts highimpact research and consulting projects for clients in the education sector and provides rigorous coursework, skills training, and realworld experiential learning for our graduate students who attend programs at Columbia University and across the country.

Since our founding in 2011, CPRL has provided research and consulting support to state agencies, school districts, charter school organizations, foundations, advocacy groups, and others, completing 200 projects and counting. For more information about CPRL, visit cprl.law.columbia.edu.

Photo on the Cover: Ashley Tate is a teacher resident at Nashville Teacher Residency. This picture was taken at LEAD Cameron.

Table of Contents

Acknowledgments From NCTR	2
Executive Summary Introduction About This Study Methods Findings	5 5 6 7
Introduction: Teacher Diversity For Equitable Outcomes	9
The National Center For Teacher Residencies And Its Black Educators Initiative	10
About This Study	13
Barriers To Entry And Retention Into The Teaching Profession	14
Barriers To Entry	15
Barriers To Retention	15
Approaches To Addressing The Barriers To Entry And Retention	16
Methods	18
Study Design	18
Limitations	24
Findings	25
Recruitment	25
Retention	33
Discussion	50
Resident Recruitment And Selection	50
Residency Year Experience	50
Mentor Recruitment, Selection, And Support	50
Considerations For The Future: NCTR	51
Considerations For The Future: Partner Residencies	53
Areas For Future Study: Potential, Precision, Power	53
References	55
Appendix 1: Technical Analyses	59
Appendix 2: Interview Guides	65

Executive Summary

Introduction

While the number of teachers is growing nationally, proportionally, fewer Black teachers are joining the profession than teachers from other racial groups. In addition, Black teachers leave the teaching profession at higher rates than do teachers from other racial groups (Campoli, 2017). The teaching workforce is overwhelmingly White and most Black students rarely encounter a Black teacher. In 2017-2018, just 7% of public school teachers were Black and non-Hispanic, while 79% of public school teachers were White (National Center for Education Statistics, 2022).

To address the shortage of Black teachers, the National Center for Teacher Residencies (NCTR) launched its Black Educators Initiative (BEI) in 2019. Through BEI, NCTR provides grants and support to teacher residencies that dedicate the funds to recruiting, preparing, and retaining Black educators.

NCTR is the only national organization committed to building and developing teacher residencies as a lever to address the enduring and systemic inequities in school systems.

Through community-based, clinical preparation that is tailored to partner school districts' context, NCTR supports teacher residencies in their goals to increase teacher diversity, effectiveness, and retention. NCTR's Black Educators Initiative aims to improve outcomes for Black students in particular, and for all students generally, by increasing access to effective Black teachers. Through BEI funding, NCTR invested in teacher residency programs that are committed to diversifying the teacher workforce through new and innovative strategies for the recruitment, preparation, and retention of Black educators.

Each BEI program used BEI funding for one or more of these strategies:

- Stipends
- Emergency funds for Black residents
- Training costs and additional stipends for Black mentors
- Test prep for Black residents
- Affinity groups
- Mentor recruitment and training
- · Pre-residency summer program to recruit Black teachers
- Recruitment staffing

About this Study

With support from the W. Clement & Jessie V. Stone Foundation, NCTR partnered with Columbia University's Center for Public Research and Leadership (CPRL) to conduct a formative evaluation of its BEI program to identify promising strategies for recruiting and retaining Black educators. This exploratory study focuses on the original eight residencies* that participated in BEI and the results they achieved in the first two years of the program: School Years 2019-—2020 (SY2020) and 2020—2021 (SY2021). The study is designed to answer the following primary research question and sub-questions:

What are promising strategies for recruiting, supporting, and retaining Black educators?

- a. In what years, why, and how do BEI programs successfully meet their Black educator recruitment targets?
- b. In what years, why, and how are BEI programs more successful in recruiting Black educators to teacher residency programs compared with other residency programs in our network?
- c. What are the racialized experiences of Black educators in the BEI initiative?
- d. In what years, why, and how do programs participating in the BEI initiative improve graduation rates for Black residents?
- e. In what years, why, and how do programs participating in the BEI initiative increase hiring rates of Black educators in partner districts and Title I schools?
- f. What programmatic interventions applied in the BEI programs are most predictive of the perceived effectiveness of Black educators?
- g. What, if any, combinations of interventions are most effective at helping Black educators enter and stay in the profession?

Methods

To answer the study questions, the research team:

- Conducted a literature review;
- Interviewed 21 teacher residents, mentors, graduates, principals and administrators across the eight teacher residencies that have participated in BEI in its first two years;
- Analyzed existing transcripts from focus group discussions conducted by NCTR with 58 teacher residents and mentors;
- Reviewed publicly available reports related to the work of each residency;
- Analyzed existing data from NCTR on annual application, acceptance, enrollment, and graduation rates for each residency, disaggregated by race at each stage of the process from 2020 onward; and
- Analyzed results of NCTR stakeholder surveys measuring participant experience and satisfaction, as well as perspectives on preparedness and effectiveness from other stakeholders, including program graduates, mentors, and principals of schools where residents were placed and ultimately hired.

Using a concurrent triangulation, mixed-methods design, the research team analyzed qualitative and quantitative data. Both quantitative and qualitative data were given equal priority in the study; findings from the quantitative data were compared to the findings from the qualitative data to explore the ways in which study participants experienced their residency programs. This design enabled the research team to understand, for example, why a strategy had or had not "worked" in terms of the intended outcomes.

*Pseudonyms have been used in place of participant and residency names to protect the identity of the participants

Findings

In the first year of the initiative, two of the eight programs met their enrollment targets; in the second year, that number doubled

The BEI program launched in September 2019, five months before COVID-19 closed schools across the United States, so it is not surprising that residencies had difficulty meeting their enrollment targets. In SY 2021, four of the eight residencies were able to meet their targets, either because they set more attainable goals or because they employed strategies that enabled them to recruit more Black residents than in the previous year.

BEI programs consistently recruit larger numbers and proportion of Black residents compared with other residencies in the NCTR network

The original eight BEI programs on average had 16 percentage point higher proportions of residents who are Black, on top of a baseline of 21 percent.

BEI's financial strategies are associated with meeting Black enrollment and graduation targets

Having professional recruitment staff is positive associated with a program's receiving more Black applicants. All other strategies are positively, but modestly, associated with meeting Black enrollment and graduation targets. These include: emergency funds for Black residents; training costs and additional stipends for Black mentors; test preparation support for Black residents; and a p summer program to recruit Black teachers.

Promising recruitment strategies addressed potential barriers, including the following:

- 1. Identifying and partnering with organizations with highpotential, diverse membership;
- Providing and emphasizing the financial benefits of enrolling in the program;
- 3. Using high-touch, responsive practices such as following up with potential applicants individually.

The introduction of BEI is associated with an average increase of 21 graduates

This result is not statistically significant, but has a p-value of 0.13 and may be worth further investigation given the small sample. Not all residencies collected graduation data disaggregated by race; therefore, we were able to calculate the overall increase in the number of graduates rather than the number of Black graduates.

About 14 additional BEI graduates, on average, were hired in Title I schools and about 24 additional graduates were hired in partner districts after BEI was implemented

Both of these results are statistically significant. As noted before, disaggregated data by race on placement was not available.

Financial support is a prerequisite for entry into the program and plays a crucial role in retention

- Emergency funds made the difference between residents "staying in the program or quitting" (BEI Administrator)
- Stipends were essential to entry to the program they were not enough to live on.
- Money and support for licensing enabled residents to obtain their licenses.

Residents' assessments of their own preparation to teach trended downward from SY2020 to SY2021

Residents' assessments of their preparation to teach are also lower for Black residents than all other residents; they are slightly lower for BEI programs than for the rest of the network.

In contrast, graduates' assessments of their preparation to be effective teachers is trending upward. For all residencies, Black graduates' assessments of their preparation to be effective teachers is increasing so much more rapidly that they now outpace other groups of graduates. There were no large differences between principals' assessments of preparation between BEI and non-BEI residencies. From survey data, we learned that BEI residents felt that their program coursework was relevant to their school context and classroom, and that the program offered a good balance of theoretical and practical strategies to strengthen their effectiveness in the classroom.

There could be three reasons why residents have low assessments of their preparation to teach. First, residents highlighted the mismatch between the values of social justice of the residency and the climate of the schools where the residents would work. Second, they spoke about the mismatch between coursework, which tends to be traditional, and residency climates, which were more oriented to social justice. Third, all residencies were not able to integrate a social justice lens throughout the program, for example preparing residents to act as advocates for themselves and for their students. Residents, therefore, may have felt unprepared to teach high-need students in their district.

BEI mentors valued and affirmed residents' identities

Four of the eight BEI residencies were intentional about mentor recruitment and worked closely with their schools and districts to find effective teachers to work with BEI residents as their mentors. We did not see a distinct pattern in the interview data that might tell us whether a racial match was essential to the mentor-resident relationship.

Work conditions and climates differed between residencies and their partner schools

Residents found that residency climates were affirming, but they were frustrated by the school climates they experienced during clinical preparation. The BEI residency programs can mostly be characterized as having positive, healthy climates. The most consistent indicator of climate among residency program participants, graduates, mentors, and administrators was the level of support and sense of community that the programs offered. In residency programs based on a cohort model, residents frequently named the community as a positive factor in their feelings of support.

While the residency curriculum emphasized cultural responsiveness, the school curricula and environment did not always reflect that climate, and residents were left feeling frustrated. Residents noted a lack of diversity in leadership in both their residency programs and their schools, and Respondents commented that this leadership feature played a substantive role in school or residency climate.

When designed to meet the needs of Black residents, affinity groups provide a space for residents to reflect on and grapple with their experiences in the program, including the often hostile climates they faced in their schools. When the affinity groups were less successful, residents noted that there weren't enough Black educators to support the groups, or that they were being asked to participate in an affinity group as an add-on activity with a full workload.

Introduction: Teacher Diversity for Equitable Outcomes

While the number of teachers is growing nationally, the rates of annual departures remain high in elementary and secondary teaching with higher departure rates among teachers of color than White teachers. And because Black teachers are "two to three times more likely to work in high-poverty, high-minority, urban, and rural public schools," (Ingersoll et al. 2021, p. 22) those schools experience the highest rates of teacher turnover. In their analysis of the composition of the teaching workforce over the last ten years, Ingersoll et al. (2021) demonstrate that the teaching workforce has become 'greener' with a larger proportion of beginning teachers than experienced teachers. This trend has implications for student outcomes because teacher quality matters: students taught by teachers with more years of experience, greater subject matter expertise, and higher levels of education are more likely to perform better and obtain a bachelor's degree (Lee, 2018). Greater teacher effectiveness improves student performance for all students with lower achieving students being the first to benefit (Sanders & Rivers, 1996; TNTP, 2018;).

Black teachers, in particular, are a key driver of more equitable outcomes for Black students (Ingersoll, 2001; Papay et al., 2012; Schaeffer, 2021).

A study of Black high schoolers' perceptions of their STEM teachers found that shared racial identity with teachers fostered a motivation for Black students to pursue a STEM career (Lee et al., 2022). Moreover, having a Black teacher can improve math and reading levels (Dee, 2004). Indeed, Black students who have just one Black teacher during elementary school are more likely to graduate from high school and consider going to college (Carver-Thomas, 2018). The positive impact of Black teachers on Black students can be explained by a number of factors, including a shared cultural understanding (Mitchell, 1998), higher expectations that Black teachers maintain for Black students (Gershenson et al., 2021), and culturally affirming pedagogical strategies, which Black teachers are more likely to use in the classroom (Bristol & Martin-Fernandez, 2019). Research shows how Black teachers inspire and empower their Black students and fuel their achievement (Ronfeldt & Campbell, 2016). In these teachers, Black students are more likely to find someone in the classroom who speaks to their experiences, helps them navigate challenges, and sees and nurtures their endless possibilities.

Yet, the teaching workforce is overwhelmingly White, and most Black students rarely encounter a Black teacher. In 2017-2018, just 7% of public school teachers were Black and non-Hispanic, while 79% of public school teachers were White (National Center for Education Statistics, 2022). There are a number of reasons for the low share of Black teachers in the workforce. These include, for example, lower high school graduation rates for Black students due to early opportunity gaps, and resulting lower college enrollment and graduation rates (Carver-Thomas, 2018). Once they enter the profession, Black teachers in particular often face hostile school environments and unsupportive work conditions, leading to high turnover once they enter the profession (Grooms et al., 2021). To address the shortage of Black teachers, the National Center for Teacher Residencies (NCTR) launched its Black Educators Initiative (BEI) in 2019. Through BEI, NCTR provides grants and support to teacher residencies that dedicate the funds to recruiting, preparing, and retaining Black educators.

The National Center for Teacher Residencies and its Black Educators Initiative

NCTR is the only national organization committed to building and developing teacher residencies as a lever to address the enduring and systemic inequities in school systems. Through community-based, clinical preparation that is tailored to partner school districts' context, NCTR supports teacher residencies in their goals to increase teacher diversity, effectiveness, and retention. NCTR's Black Educators Initiative aims to improve outcomes for Black students in particular, and for all students generally, by increasing access to effective Black teachers. Through BEI funding, NCTR invested in teacher residency programs that are committed to diversifying the teacher workforce through new and innovative strategies for the recruitment, preparation, and retention of Black educators. Through collective learning from the residency programs that participate in BEI, NCTR aims to advance research, improve support for all teacher residencies within its network, and help the teacher preparation field better understand how to build a diverse, effective teacher workforce.

Figure 1 provides an overview of the original eight residencies* that participated in the BEI program. Black enrollment numbers are from SY2021 except for Franklin because it no longer has a residency.

Figure 1: Original eight BEI residencies**



*Pseudonyms have been used in place of participant and residency names to protect the identity of the participants

**Franklin did not have a residency program in SY2021 so this number is from SY2020

Three years since its launching, the BEI program has expanded from eight residencies participating in the pilot year, to 20 teacher residencies across NCTR's network. This growth is thanks to a five-year, \$20 million grant that NCTR received from the Ballmer Group to recruit, prepare, and retain 750 new Black teachers through its national network.

Levers Used by the BEI Residency Programs

Each year, the teacher residencies that participate in the BEI program leverage BEI funds to enhance and inform their operational strategies in three primary areas. First, BEI funding enables teacher residencies to implement recruitment strategies targeted at attracting greater shares of Black candidates than traditional teacher residencies or teaching pathways into teaching typically garner. Second, BEI funding enables teacher residences to create learning environments and offer professional development opportunities that address the financial and cultural barriers that otherwise discourage Black individuals from pursuing and/or securing careers in teaching. Third, BEI funding enables teacher residencies to invest in support mechanisms designed to increase the likelihood of retaining for Black graduates of their programs that aim to increase the likelihood of their retention in the field.

In execution, BEI funding facilitates innovative practices that are common across the participating teacher residencies' efforts to recruit, prepare, and retain Black educators. Recruitment practices include recruiting at places with high percentages of Black people, such as historically Black colleges and universities (HBCUs); developing recruitment materials that highlight people of color; hiring Black individuals to recruit candidates with whom they share similar cultural experiences; and providing high-touch support to Black candidates throughout the application and interview processes. Preparation practices that offset financial barriers include providing Black residents with stipends, scholarships, and access to emergency funds, among others, which allow Black residents to remain enrolled and complete the residency programs. Preparation practices that offset cultural barriers include partnering with diverse and culturally-responsive schools where Black residents complete their clinical experience, matching Black residents with effective mentor teachers, and creating affinity groups to provide residents who share identities the time and space to reflect on their experiences together. Retention practices include helping Black residents secure teaching jobs as they near graduation and continuing to offer support throughout their first few years' working as teachers.

Table 1 (on the following page) provides a summary of recruitment and retention strategies that residencies were able to fund through the BEI grant.

As a participant in the NCTR network, each residency benefits from collective learning, research, and support from one another and from NCTR. While each participating residency operates independently to recruit, prepare, and retain Black educators, NCTR processes applications from new teacher residencies to join the BEI program, oversees how residencies use the funds, and collects and analyzes learnings from the participating residencies to inform and improve BEI's strategic levers each year.

Table 1: BEI budget allocations by residency

Residency	Asbury	Bayonne*	Caldwell	Danbury	Englewood	Franklin**	Glassboro	Haddonfield
Scholarships	Х		Х	Х	Х		Х	Х
Stipends	Х		Х	Х	Х		Х	Х
Healthcare			Х		Х			
Childcare		Х						
Testing / Licensure	Х	Х	Х		Х	Х		Х
Books / Supplies		Х	Х				Х	
Technology		Х		Х				
Transportation		Х	Х					
Emergency Funds		Х	Х				Х	Х
Loans					Х			
Recruitment materials/ services	Х		Х	Х		Х	Х	Х
Recruitment	Х	Х		Х				Х
Recruitment consulting	Х			Х				
Mentor stipends		Х			Х	Х	Х	Х
Mentor support & training	Х							Х
Residency programming	Х	Х			Х			Х
Partnerships		Х	Х		Х		Х	
Affinity groups	Х	Х			Х	Х	Х	Х
Induction & graduate support		Х					Х	Х
Program administration	Х	Х	Х	Х	Х	Х	Х	Х

*Although these funds are not covered through the BEI budget, residents receive a stipend from the school district and get a tuition discount for the coursework.

** Franklin discontinued its residency program in SY 2021 and budget allocations are limited to SY2020. Franklin used BEI funds to convene Black educators across its network to develop strategies to address challenges faced by Black educators.

About this Study

NCTR partnered with Columbia University's Center for Public Research and Leadership (CPRL) to conduct a formative evaluation of its BEI program, to identify promising strategies for recruiting and retaining Black educators. This exploratory study focuses on the original eight residencies that participated in BEI and the results they achieved in the first two years of the program: School Years 2019–2020 (SY2020) and 2020–2021 (SY2021). The study is designed to answer the following primary research question and sub-questions:

What are promising strategies for recruiting, supporting, and retaining Black educators?

- a. In what years, why, and how do BEI programs successfully meet their Black educator recruitment targets?
- b. In what years, why, and how are BEI programs more successful in recruiting Black educators to teacher residency programs compared with other residency programs in our network?
- c. What are the racialized experiences of Black educators in the BEI initiative?
- d. In what years, why, and how do programs participating in the BEI initiative improve graduation rates for Black residents?
- e. In what years, why, and how do programs participating in the BEI initiative increase hiring rates of Black educators in partner districts and Title I schools?
- f. What programmatic interventions applied in the BEI programs are most predictive of the perceived effectiveness of Black educators?
- g. What, if any, combinations of interventions are most effective at helping Black educators enter and stay in the profession?

Barriers to Entry and Retention into the Teaching Profession

Growing evidence shows that teacher residency programs are effective in increasing Black teacher recruitment and retention (Carver-Thomas, 2018; Ingersoll & May 2011; Ronfeldt et al., 2013; Silva, et al.; 2014; Simon & Johnson, 2015). Teacher residencies are partnerships between districts and education prep providers (EPPs) to subsidize and improve teacher training in high-need schools and in-demand subject areas. Teacher residents typically spend an academic year working in the classroom with mentor teachers and completing related coursework through partner EPPs. Residents receive financial support and, in turn, often commit to teaching in their district for an additional three to five years with continuing support from mentors (Hammerness, 2016).

Enrollment into a residency program represents a culmination of the recruitment process: application, acceptance into the program and finally, decision to enroll into the program (Coffman, 2014). Once enrolled in the residency program, residents typically must complete all the requirements of the program, including coursework, clinical preparation and state licensing exams, before they can graduate from the program. Finally, the goal for any teacher preparation program is for graduates of their programs to be hired and placed within school districts.

Figure 2 illustrates the steps in the process. Unfortunately, there is potential for a considerable number of departures at each stage in this recruitment-through-placement process (Silva, 2014).

The following sections address some of the challenges that teachers face during each stage. Discussions are organized by the key areas of focus in this study – recruitment and retention – which encompass all of the stages described in Figure 2. Since the quality of preparation is one of the factors that influences retention, it is discussed within the section on retention.

Within the section on recruitment, we begin by identifying the barriers to entry that Black teachers face. Next, we discuss the factors associated with the high teacher turnover rates, especially for Black teachers. Then we consider the literature on promising strategies for recruitment and retention of Black teachers. The teacher residency program is one such strategy, and we highlight the ways in which residency programs have reduced barriers to entry and retention for Black teachers.



Figure 2: Application-through-placement process

Barriers to Entry

The opportunity and achievement gaps for Black teachers

Opportunity and achievement gaps by race and ethnicity in P–12 schools mean that fewer people of color, especially Black people, are college ready and, as a result, eligible to be teachers. Black students tend to attend schools that are large, underfunded, and lack high-quality resources, including the most important resource, effective teachers (Madkins, 2011). Consequently, Black students drop out of high school at higher rates than White students (Irwin, 2021).

Furthermore, entry into the teaching profession requires more than high school completion, as candidates must complete college as well. Black students are less likely than White students to have access to college-ready courses; therefore, fewer Black students enroll in college than White students (Ingersoll, 2011). Finally, those Black students who make it to college are half as likely to complete college than Asian American and White students (DeAngelo et al., 2011). Thus, there is a disproportionate number of Black students leaving at every stage, from school completion rates, to enrollment in college, to college completion.

Historically, teaching is not a prestigious profession

For the Black students who are successful in college, teaching is not an attractive career option. A study of African American male, college-aspiring, high school students who performed well academically revealed negative perceptions of teachers and teaching that likely affected their desire, or lack thereof, to enter the profession (Graham & Erwin, 2011). In fact, when asked if teaching was a career they would consider after college, only 1% indicated that they would consider it (Graham & Erwin, 2011). The rate of interest went up to only 25% when presented with the hypothetical benefit of a four-year paid scholarship (Graham & Erwin, 2011). Males in particular face a "prestige penalty," because of the lower wage and perceived lower status of the teaching profession; this perception is reflected in the low number of Black males in the teaching profession (Ingersoll, 2021).

The costs and opportunity costs of teaching

Black teachers, with other teachers of color, shoulder the obligations of teaching with the burden of financial strains. Not only do Black teachers earn less than White teachers (Smith, 2021), they also face higher debt (Allegretto & Mishel, 2019). The high cost of traditional teacher preparation programs, therefore, poses a disproportionately higher burden on Black teachers who are already more likely to have a higher burden of debt.

The cost of teacher licensure creates additional financial barriers to entering the profession. Take the example of the New York State's teacher certification examination. This examination, which costs \$300 to take and which Black test-takers pass at about half the rate of White test-takers (Chang, 2021), poses a crucial barrier to entry to the profession. It can especially deter Black candidates who are already plagued with financial impediments such as student loan debt (Flannery, 2021; Miller, 2017).

Barriers to Retention

Nationwide, the number of students of color has been increasing while the number of teachers of color has been decreasing, fewer students of color, therefore, experience a teacher of color in their classroom (Ingersoll et al., 2021). However, the mismatch between the proportions of students of color to the proportion of teachers of color is not only driven by a lack of recruitment of teachers of color and Black teachers, in particular. During the last few decades, federal, state and private efforts to increase the number of teachers of color have been successful. For example, from SY1987-88 to SY2017-18, the number of Black teachers increased by 29%, while the number of Asian and Hispanic teachers increased by 263% and 373%, respectively (Ingersoll et al., 2021, p. 19). However, proportionally, fewer Black teachers are joining the profession. In addition, Black teachers leave the teaching profession at higher rates than do teachers from other racial groups (Campoli, 2017). Next, we discuss the main factors behind the high departure rates for Black teachers.

Underpreparation can lead to high departure rates

Teachers of color are twice as likely to enter the teaching profession through an alternate teacher pathway (Carver-Thomas et al., 2017) but the way in which a teacher is prepared can be a stronger determinant of retention in the profession than a specific pathway type (Ingersoll et al., 2014). A qualitative study of Black female teachers revealed that a majority felt that their teacher preparation program did not fully prepare them for their roles (Farinde-Wu et al., 2019). Black women discussed concerns of limited knowledge related to special education programs, the absence of culturally responsive teaching strategies, and a lack of preparation to teach underserved youth (Farinde-Wu et al., 2019). This is consistent with several studies that indicate that lack of adequate teacher preparation is one of the reasons for high teacher departure rates (Grooms et al 2021; Ingersoll & May, 2011; Ingersoll et al., 2018; Ingersoll et al., 2021).

Work conditions and climate play a key role in high departure rates for Black teachers

Racialized spaces, working conditions, and collegial relationships determine a school's work conditions and climates (Amos, 2020; Griffin & Tackie, 2016). Indeed, "supportive and effective" leadership is one of the most important factors in teacher retention (Campoli, 2017, p. 681). Developing relationships with teachers and students is also an important part of a teachers' work conditions and, unfortunately, Black teachers are more likely to report work conditions where they are "pigeonholed by peers, parents, and administrators into specific roles" (Amos, 2020) or where they face microaggressions, sabotage, and surveillance (Amos, 2020; Grooms et al., 2021). Black teachers struggle with feeling hindered professionally, undervalued and unappreciated in workplaces that ask them to stifle their personalities and hold back their opinions (Griffin & Tackie, 2017). Efforts to grow the population of Black teachers must extend to addressing the experiences unique to Black teachers, starting from their first exposure to the profession.

Approaches to Addressing the Barriers to Entry and Retention

High-touch, personalized recruitment methods can overcome some barriers to entry

Successful recruitment efforts often involve extended contact with and support for potential teacher candidates. For example, Minneapolis Public Schools employ high-touch recruitment methods that involve actively following up with applicants of color, holding information sessions, and building relationships with the community. Individual and group information sessions can be used to provide information about program costs and financial support, career trajectories, and other forms of support that trainee teachers might receive such as opportunities for extended mentoring and clinical experience (Carver-Thomas, 2018). Other effective recruitment measures include recruiting through Black and Latinx affinity organizations and utilizing current teachers and administrators of color as connectors (Scott & Alexander 2019; Carver-Thomas, 2018).

Financial incentives

As discussed previously, the financial cost of completing a traditional preparation program is high. Offering and advertising financial incentives, such as scholarships for tuition or stipends, can help alleviate these costs and can empower Black teachers, who tend to face greater financial burdens, to join the profession.

Indeed, one of the reasons so many teachers of color choose alternate teacher preparation pathways is because those programs pose a lower financial burden (Scott & Alexander, 2019).

The summer hiatus between program completion and the start of the school year may create another financial burden for teachers because scholarships or stipends received during the program come to an end, but jobs don't begin until the fall semester. While the BEI programs offer stipends through the summer, most traditional teacher preparation programs do not have this provision. Some districts have successfully experimented with moving up hiring timelines so that graduates can secure a job before they graduate, thus reducing any anxiety about placement (Carver-Thomas 2018). Districts and programs may also benefit from leading recruitment efforts with clear messages about financial incentives such as higher salaries, loan forgiveness, and signing bonuses (Bland et al., 2014).

Clinical preparation

Preparation is critical to retention because it can enhance a teacher's initial effectiveness, thereby encouraging them to continue (Darling-Hammond, 2010). There is growing consensus that clinical experience is a critical component to preparing effective teachers (Darling-Hammond, 2012; Zeichner, 1993). At least four large-scale studies that have examined the relationship between the duration of student teaching and self-reported preparedness to teach have found positive relationships between the two (Ronfeldt, 2021).

A study of effective preparation programs in New York City revealed the hallmark features of impactful preparation. These features included careful oversight of the quality of student teaching experiences, an accurate representation of the classroom setting in which the student teacher will ultimately begin teaching, an opportunity for student teachers to study the district curriculum, and a capstone project (Boyd et al., 2009). The teacher residency model for teacher preparation is designed to integrate extensive clinical experience and effective mentoring with coursework.

Teacher residency programs

Teacher residency programs aim to address many of the barriers that keep Black teachers from classrooms, while providing support to help keep them in them. Modeled after medical residencies, teacher residency programs developed as a way to attract more teachers into the profession. Residency programs provide a hands-on learning experience during which teachers spend a year in an apprentice-like role in a school, receiving ongoing support and mentorship while completing aligned coursework at a local university and gradually taking on more responsibility. Such support helps reduce feelings of isolation and burnout that often lead to teacher turnover (Matsko et al., 2022; Silva et al., 2014). Residency programs integrate at least a year of clinical experience in the school systems in which teachers are placed, thus, addressing, potentially, one of the critical barriers to retention–preparation to teach in the school context. Residency programs also typically create and foster networks of collaboration, which help new teachers feel supported throughout their initial years in the classroom.

Financial support in the form of grants, stipends, or salaries during the clinical residency lifts a common barrier for potential educators and attracts a much more diverse applicant pool (Bland et al., 2014; Boyd et al., 2009; Carver-Thomas, 2018; Silva et al., 2014)

Are they effective? An expanding body of research has found that teacher residency programs are effective in addressing the national teacher shortage, including Black teacher shortages (Chu et al., 2022; Coffman, 2014; Darling-Hammond, 2012; Garza et al., 2014; Guha et al., 2017; Papay et al., 2012). For example, 23% of the active graduates of the Boston Teacher Residency (BTR) program identify as Black or African American compared to teacher preparation programs nationally, where just 10% of graduates from teacher preparation programs identify as Black or African American (Papay et al., 2012). This is a significant difference given that 71% of BTR graduates end up teaching in their districts through Year Six, as compared to 51% of their non-residency counterparts (Papay et al. 2012). In a series of longitudinal studies of the Urban Teacher Residency (UTR) Project in New York, Rockman et al (2018) found that UTR teachers had a positive impact on student achievement and that UTR teachers stayed longer in the classroom than other New York City public high school teachers. Similarly, Roegman et al. (2017) found that in the fifth year, 85% of teacher residency graduates in their study were still teaching and 70% of these remained in the residency's partner district.

Methods

Study Design

Mixed methods

Using a concurrent triangulation, mixed-methods design, the research team analyzed qualitative and quantitative data to "confirm, cross-validate, or corroborate findings within the study" (Cresswell et al., 2003, p. 183).

Figure 3 illustrates the design of the study. Both quantitative and qualitative data were given equal priority in the study, and findings from the qualitative data were given equal priority in the study participants experienced their residency programs. This design enabled the research team to understand, for example, why a strategy had or had not "worked"- in terms of the intended outcomes. For example, from an analysis of the quantitative data, we found that stipends were positively correlated with the number of Black residents recruited into each program. From the study participants, we heard why these stipends were important and how these had influenced their decision to join the program.

Figure 3: Concurrent mixed methods design



Sources of data

Figure 4 provides an overview of the sources of data for this study.

Annual enrollment, graduation and hiring data

Our quantitative data was compiled by NCTR and comprised data received from its partner teacher residency programs, including the 8 original BEI programs, 14 programs that later joined BEI, and 23 programs that did not participate in BEI. These data include administrative data on applications, selection, recruitment/participation, graduation, placement, and retention, disaggregated by race at each stage of the process from 2020 onward.

Figure 4: Sources of Data



Stakeholder survey data

The data also included the results of the Stakeholder Survey, which is administered twice per year by NCTR to residents and mentors and once per year to graduates and principals of schools where residents teach. For simplicity and consistency, we focus on the End of Year surveys in this analysis. NCTR gathers this information for two primary purposes: to understand the racialized experiences of residents, particularly Black residents, in BEI residencies versus other NCTR residencies, as well as to capture additional preliminary measures of program effectiveness beyond graduation, placement, and retention (e.g., resident satisfaction and self-perceived preparedness to teach).

The Stakeholder Survey is administered twice per year, around December–January for the mid-year survey and April-June for the End of Year survey, and has undergone considerable revision over the past several years. Currently, it is administered directly by NCTR but was previously administered by individual partner programs; consequently, NCTR and we do not calculate or report a formal response rate in all years due to differences in recruitment and sampling procedures both between programs and over time. Nonetheless, we report the overall number of responses for the End of Year (EOY) surveys for 2020 and 2021, the main source for our analyses, as well as response rates for these years, and preliminary responses for the 2022 End of Year survey (see Table 2).

The surveys were initially developed to align with the conceptual framework for residency programs. Over time, items were added to increase focus on the efficacy of stakeholders, on the theory that efficacy aligns with impact, and on elements of teacher competencies, based on input from four residencies grounded in their teacher effectiveness frameworks. As the survey became longer, NCTR worked with external consultants to validate the survey; reduce the number of items; focus on items that would produce actionable data; and increase focus on diversity, equity, and inclusion efforts.

Table 2: Number of responses for each of the stakeholder surveys

Year	Number of Resident Responses	Number of Black or African American Resident Responses	Resident Survey Response Rate
2020 EOY	390	87	63%
2021 EOY	700	178	65%
2022 EOY*	283	62	

*Preliminary; still ongoing.

To analyze racialized experience of residents, we selected questions that specifically related to residents' experiences as they pertain to affirming racial identity, ensuring residents were treated fairly and equitably regardless of race, and determining whether sense of belonging and inclusiveness within the program varied by resident race. To analyze residency effectiveness, we focused on Net Promoter Scores for various stakeholders and how those varied by race, resident, graduate, and principal reports of residents' preparation to be a first-year teacher of record. We also examined responses to the following questions about residents' preparedness to teach in specific school contexts.

We included these items focused on resident experience, identity, and equity:

- 1. "My coursework instructors (includes residency program staff, university faculty, etc.) make me feel comfortable approaching them with questions or concerns."
- 2. "My program's assessment system fairly assesses my performance."
- 3. "My current or most recent classroom mentor provides me feedback in a way that values and affirms my full identity."
- 4. "My school leader makes me feel comfortable approaching them with questions or concerns."
- 5. "My coursework instructors (includes residency program staff, university faculty, etc.) make me feel comfortable approaching them with questions or concerns."

We also included these items focused on preparedness, particularly focused on specific contexts in which they will teach:

- 6. "The residency program offers residents a good balance of theoretical and practical strategies to strengthen their effectiveness in the classroom."
- 7. "The coursework provided to residents by the residency program is relevant to my school context and classroom."
- 8. "The residency program provides graduates with relevant professional development opportunities."

We cross-referenced these quantitative data with data on budgetary allocations and program features, as well as with our qualitative findings on program strategies and resident experiences, to contextualize results, more deeply understand reasons for variability across programs, and generate hypotheses and questions for further research.

Individual and focus group interviews

Qualitative data comprised individual and focus group interviews with a total of 78 residents, mentors, graduates, principals and residency administrators across seven residency programs . All residents, mentors and graduates interviewed identified as Black. Of these, 53 represented BEI programs and 25 represented non-BEI programs, a term used in this report to define teacher residency programs within NCTR's network that did not participate in the BEI pilot year. The semi-structured interviews lasted from 30 to 60 minutes. Interview guides are in Appendix 2.

Recruitment of study participants

We sought to recruit Black members of the eight residency programs that participated in BEI in the program's pilot School Year 2019–2020 and remained involved in School Year2020–2021. In selecting participants, we sought to reflect the full range of participants in the program: residents, graduates, mentors, principals, residency administrators and relevant NCTR administrators. We also aimed for a balanced representation from each residency program. Figure 5 captures the steps we took to recruit participants for the program.

Figure 5: Steps Taken to Recruit Study Participants



Figure 6 summarizes the total number of participants in focus group discussions and interviews by residency program.

Figure 6: Number of Study Participants in Focus Groups and Interviews by BEI Residency



Analyses

This evaluation is preliminary and meant to generate early findings for further exploration. Although the research team performed inferential statistics by running tests of significance between BEI and non-BEI programs, within BEI programs by program feature, and within BEI programs over time, we did not expect to find many statistically significant findings because of the small sample and the program-level analysis.

We analyzed transcriptions of the focus group discussions and detailed notes from the interviews in two stages. In the first stage, we generated a set of codes using "structural coding," a tactic that is useful in exploratory studies such as this one. Structural coding uses codes based on the study's questions to label and index data and subsequently identify "commonalities, differences, and relationships" (Saldana, 2016, p. 98). Next, we used "pattern coding" to identify emerging categories and themes. This second stage of coding enabled us to identify the "why" and "hows" of recruitment, preparation, and retention rates by grouping patterns by residency. We then compared those to the findings from the quantitative data. Because a team of researchers worked on this study, a detailed codebook was created and codes were normed by members of the group to ensure consistency of coding.

Quantitative analyses by research questions

In what years, why, and how do BEI programs successfully meet their Black educator recruitment targets?

To analyze this question, we first compared actual numbers to goals for each program, each year, each stage of the recruitment process (i.e., applications, acceptances, actual participation, and graduation) for Black residents. Then, to better understand how and why these targets are or are not met, we ran a series of regressions using key outcome variables of interest at specific milestone stages of the process: a)whether Black residents actually enroll and participate (representing the culmination of the recruitment process of applying, being accepted, and choosing to participate) and b) whether they graduate (representing whether BEI residencies met their goals in these areas and both the number of Black residents at each stage and the percentage of Black residents at each stage). These indicators account for differences in size and scale across residencies given that BEI residencies tend to be larger and situated in urban areas. They also highlight the importance of increasing both the absolute number and relative share of highly effective Black educators. We used each of these outcome variables, in turn, in a series of regressions on descriptive factors that may explain variability in results and in residencies attaining their goals, including different budgetary allocations and program features. We also looked at descriptive trends in outcome by individual program to note any outliers, strikingly positive or negative results by program and year, or trends over time for further qualitative investigation.

In what years, why, and how are BEI programs more successful in recruiting Black educators to teacher residency programs compared with other residency programs in NCTR?

To examine this question, we ran a series of regressions comparing the outcomes previously discussed-recruitment, graduation, placement and retention for Black residents-between the original eight BEI programs to the remaining programs in the NCTR network. We also compared outcome variables against the subset of residency programs that were not BEI programs given that some programs that joined BEI later may have adopted similar strategies in later years, thus muting potential results. To determine whether there are years in which BEI is particularly successful or if there are trends over time, we also included an interaction with a "Year" variable.

What are the racialized experiences of Black educators in the BEI initiative?

To address this question quantitatively, we analyzed whether mean values on the survey items are higher or lower for BEI residencies than the rest of the network, how they change over time, whether there is a difference in these survey measures for Black residents compared to all other residents, and whether that difference is smaller in BEI residencies than other residencies. We used a series of two-tailed t-tests to test for statistically significant differences in each of these areas.

In what years, why, and how do programs participating in the BEI initiative improve graduation rates for Black residents?

For this question, we first descriptively examined variability in graduation rates among programs and over time. We then compared graduation rates before and after BEI for the original eight BEI programs; we are unable to examine pre- and post-BEI graduation rates by race because graduation rates were only disaggregated by race from 2020 onward. We were, however, able to examine changes over time in graduation rates for Black residents within BEI programs, as well as factors that may explain those changes, such as differences in budgetary allocations and other program strategies.

In what years, why, and how do programs participating in the BEI initiative increase hiring rates of Black educators in partner districts and Title I schools?

As with the previous question, because data were not disaggregated by race prior to 2020, we are unable to analyze whether hiring rates for Black educators in partner districts and Title I schools changed between pre- and post-BEI experiences. We were able to analyze changes in placement rates for all residents in BEI residencies. Then using descriptive trend analysis and regression analysis in which we included school year as a covariate and interaction term, we analyzed changes over time within the BEI period for BEI residencies.

What programmatic interventions applied in the BEI programs are most predictive of the perceived effectiveness of Black educators?

For this question, we defined perceived effectiveness by separately looking at resident, graduate, and principal Net Promoter Scores and assessments of level of preparation to serve as an effective first-year teacher. We examined each of these outcomes by year, by comparing all residents against Black residents where applicable (i.e., for residents and graduates; principal survey results were not tied to specific residents and could not be disaggregated by resident race), and for BEI against non-BEI programs. We then examined whether individual BEI programs were improving over time on each of these measures and whether such improvements were associated with specific programmatic interventions or budgetary allocations.

What, if any, combinations of interventions are most effective at helping Black educators enter and stay in the profession?

To answer this question, we first examined whether being a BEI program is associated with greater placement of Black residents in partner districts and/or Title I schools, and longer retention rates (e.g., one year, three years, five years, few cases due to limited data) compared with all other programs and programs that were never BEI programs. We also investigated variability in these outcomes over time within BEI programs and whether such variability is associated with specific programmatic interventions or budgetary allocations.

Limitations

This exploratory study focused on eight residency programs during the first two years of the Black Educators Initiative (BEI). The findings of this study are based on initial strategies, which will continue to evolve as the BEI continues.

The two-year span of this study occurred during a global pandemic that disproportionately affected the learning outcomes of students and teachers of color, altered school plans, and forced all educators into survival mode (U.S. Department of Education, 2021b) the research team was not able to unravel the effects of the pandemic from the other factors that might have impacted teacher recruitment or retention rates; however, this report includes descriptions from study participants on the ways in which the pandemic affected their experiences.

The study evaluates the BEI programs against the goals of the Black Educators Initiative. Therefore, while the findings can be used to understand some of the ways in which these residency programs have been able to support Black graduates, they cannot be extrapolated to all teacher preparation or teacher residency programs. As the study demonstrates, the same strategy can have different results depending on the context.

Recruitment, admission, enrollment, and graduation goals for Black residents were not consistently tracked by all of the participating programs. In some cases, data were not collected by racial identity, thus reducing the research team's ability to analyze some of the effects of BEI on recruiting, preparing, and retaining Black educators.

Findings

Recruitment

Goals versus enrollment

In the first year of the initiative, two of the eight programs met their enrollment targets; in the second year, that number doubled.

The BEI program launched in September 2019, five months before COVID-19 closed schools across the United States. It is not surprising, therefore, that in SY2020, just two of the eight participating residencies met the targets they had set for recruiting Black residents (see Table 3). In SY2021, four of the eight BEI residencies met their recruitment targets for Black residents, either because they set more attainable goals or because they employed strategies that enabled them to recruit more Black residents than in the previous year. For example, in Danbury, COVID-19 gave the residency an opportunity to focus recruitment efforts more locally by placing historically black colleges and universities (HBCUs) at the center of their recruitment efforts. This strategy, combined with the financial incentives offered by the BEI initiative, likely helped programs to meet their enrollment targets in SY2021.

Residency	School Year	Enrollment Goal	Enrolled
Achum	2020	24	16
Asbury	2021	19	19
Bayonne	2020	70	27
bayonne	2021	51	54
Caldwell	2020	7	6
Caluwell	2021	12	9
	2020	10	13
Danbury	2021	22	21
Englowood	2020	40	18
Englewood	2021	17	18
Franklin	2020	5	4
Glassboro	2020	30	19
	2021	38	38
Haddonfield	2020	10	12
nauuonneiu	2021	16	15

Table 3: Enrollment targets against actual number of Black residents enrolled, by residency and year

In Appendix 1: Technical analyses, we examine trends over time. For both numbers and proportion of Black residents, BEI programs increased in SY2021 while non-BEI programs decreased in the same year, suggesting that the recruitment strategies targeting Black residents were effective.

BEI programs consistently recruit larger numbers and proportion of Black residents compared with other residencies in the NCTR network.

We compared the percentage of Black residents in BEI programs versus non-BEI programs, from SY2021 to SY2022. Table 4 shows the relationship between the original eight BEI programs and both the number and proportion of Black residents. Columns 1 and 2 include all other residencies in the comparison group. Columns 3 and 4 restrict the comparison to residencies that did not later join BEI to avoid confounding the effects of BEI (as noted above, residencies have joined the BEI program every year since 2019 and this study focuses on the original eight that joined in 2019). The row labeled "Constant" on the tables provides the baseline mean, or the average level, of each respective outcome for the relevant comparison group, while the row labeled "Original BEI" shows the increment or decrement across the original eight BEI programs. If a difference is statistically significant, or likely not due to chance alone, the number of asterisks corresponding to a particular alpha level of significance (denoted at the bottom of the table) is shown alongside the coefficient.

BEI programs are consistently successful at attracting both larger numbers and proportions of Black residents. The raw number comparison is significant when compared with all other residencies, while the proportion of residents who are Black comparison is statistically significant only when compared with programs that did not later adopt BEI. The original eight BEI programs on average had 16 percentage point higher proportions of residents who are Black, on top of a baseline of 21 percent. The research team ran similar models to those provided here, including models to determine if there are general time trends and differential time trends by BEI status, but none of these results are statistically significant; they are available in the technical appendix.

Comparison Group	All Residencies		Excluding those the	nat later joined BEI
	1	1 2		4
Variables	Black residents	Black proportion of residents	Black residents	Black proportion of residents
Original BEI	10.26*	0.07	8.70	0.16**
	(5.98)	(0.06)	(8.28)	(0.06)
Constant	11.24***	0.31***	12.80**	0.21***
	(2.80)	(0.03)	(4.93)	(0.04)
Observations	100	100	62	62
R-squared	0.03	0.01	0.02	0.10

Table 4: Recruitment numbers and proportions by BEI status, SY2022

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

Figure 7 illustrates the difference in percentage points between BEI programs and others, for SY2020 and SY2021.

Figure 7: Percent of residents who are Black in BEI versus non-BEI programs for SY2020 and SY2021



Examining enrollment performance by program strategy

After we established that BEI residency programs had recruited a larger number of Black residents than non-BEI programs, we explored associations between program strategies and the probability that a program would meet its goals. Next, we explored the association between actual enrollment and strategies listed in each program's BEI budget.

Having professional recruitment staff is positively associated with a program's receiving more Black applicants

Table 5 (on the following page) shows how the probability of meeting each goal is associated with specific programmatic features or strategies.

None of the results is statistically significant, meaning we cannot rule out that any observed relationships in the data are due to the small sample of programs and school years. Having professional recruitment staff is positively associated with a program's receiving more Black applicants and all other strategies are positively, but modestly, associated with meeting Black enrollment and graduation targets. Results using other statistical models are very similar and are available in the Appendix 1: Technical Analyses. Table 5: Probability of meeting program goals by program strategy

	1	2	3	4
Variables	Met Enrollment Goal	Met Application Goal	Met Admission Goal	Met Graduation Goal
Emergency funds	0.33		-0.60	
	(0.62)		(0.90)	
Training costs and additional stipends for Black mentors	0.33	-0.60	0.10	0.25
	(0.36)	(0.58)	(0.51)	(0.56)
Test prep for Black residents	0.33	0.40	0.10	0.25
	(0.36)	(0.45)	(0.51)	(0.56)
Pre-residency summer	0.67	-0.10		0.25
	(0.84)	(0.79)		(0.90)
Recruiters	-0.00	1.00	0.50	
	(0.44)	(0.75)	(0.74)	
Constant	-0.33	-0.40	0.50	-0.25
	(0.65)	(0.69)	(0.96)	(0.75)
Observations	22	11	11	7
R-squared	0.14	0.33	0.19	0.13

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

Because of the sheer number of budget categories and the fact that none of the relationships is statistically significant, we discuss full results in Appendix 1: Technical Analyses, except to note that spending the budget on scholarships, stipends, recruitment staffing, affinity groups, partnerships, induction, and childcare is positively associated with meeting enrollment targets.

Recruitment outcomes by BEI program strategy

Because of the fact that (1) whether or not a residency program met its goals is a binary outcome that provides limited information, and (2) goals themselves might have been too high or too low, the research team also investigated whether particular strategies and budgetary allocations are related to recruitment outcomes in terms of numbers and proportions of Black residents. Table 6 shows how specific strategies adopted by BEI programs are related to enrollment outcomes represented by the number of Black residents (Column 1) and the proportion of residents who are Black (Column 2).

Providing professional development costs for mentors is positively and statistically significantly associated with a larger number of Black residents, but negatively associated with the proportion of Black residents. This result could be because the residencies adopting this strategy are larger and thus have larger numbers of both Black residents and residents of other races.

	1	2
Variables	Black residents	Black proportion of residents
Emergency funds	13.67	0.14
	(12.71)	(0.09)
Training costs for Black residents	19.11**	-0.29***
	(7.34)	(0.05)
Test prep for Black residents	2.44	-0.24***
	(7.34)	(0.05)
Pre-residency summer	22.78	-0.31**
	(17.21)	(0.12)
Recruiters	-8.00	0.04
	(8.99)	(0.06)
Constant	1.56	0.60***
	(13.23)	(0.10)
Observations	22	22
R-squared	0.42	0.76

Table 6: Recruitment outcomes by BEI program strategy

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

As with the results on goals, because of the sheer number of budgetary categories and the fact that none of the relationships is statistically significant due to small samples, we do not present full results here for the association between budgetary allocations and enrollment outcomes. See Appendix 1: Technical Analyses for a discussion of all results.

Finally, we looked specifically at whether increasing stipends was associated with a larger proportion of Black residents. Across the whole NCTR network, that relationship is positive and statistically significant at the 0.05 alpha level. When we narrow our focus to the original eight BEI programs, the relationship is no longer statistically significant due to the small sample, but the finding is still substantively important: as seen in Table 6, each \$10,000 increment in stipend amount is associated with a four percentage- point increase in the proportion of residents who are Black.

Table 7: Association between stipend amount and proportion of residents who are Black, BEI programs

	1
Variables	Black proportion of residents
\$10,000 in Stipend	0.04
	(0.03)
Constant	0.27***
	(0.08)
Observations	22
R-squared	0.09

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

What were some promising recruitment strategies employed by BEI residencies?

We synthesized recruitment strategies that were defined as successful by BEI residency administrators, Black mentors, and Black residents. BEI funding enabled programs to focus their attention on recruiting Black residents, as reflected in the increasing number of these residents at each residency (Table 8) with the exception of Englewood, whose number of Black residents remained the same. In interviews, program administrators at all eight programs described recruitment efforts to attract Black applicants, which included recruiting at partner P—12 schools, local communities, and organizations that serve Black college students, such as HBCUs. Their descriptions suggest that the program employed high-touch, personalized support to help potential applicants in completing applications.

Four BEI residencies (Caldwell, Englewood, Franklin and Glassboro) focused their recruitment efforts on community engagement in recruitment while the other four focused on high-touch, responsive strategies (e.g., in-person follow-up with individual candidates) to attract Black applicants.

These strategies are consistent with NCTR's quality indicators for resident recruitment and selection:

- The program's commitment to diversity, equity, and inclusion is explicit in resident recruitment materials, including honoring the voice and perspectives of the communities being served by the residency.
- Recruitment process explicitly and deliberately includes high touch, personalized & targeted outreach, including testing supports, to overcome potential barriers to entry.

Table 8: Increase in the number of Black residents enrolled at each residency in SY2020 and SY2021

Residency	SY2020	SY2021
Asbury	16	19
Bayonne	27	54
Caldwell	6	9
Danbury	13	21
Englewood	18	18
Franklin*	4	-
Glassboro	19	38
Haddonfield	12	15

*Franklin discontinued its residency program in SY2021

Recruiting through partner schools and community organizations

Five of the eight BEI residencies recruited from current staff at partner schools or districts. Residencies and partner schools collaborated to market the program to potential candidates, to identify high-potential candidates through referrals, and to select candidates for the programs. Residents who were recruited in this way might include, for example, paraprofessionals, administrative staff or after-school tutors:

"Where we recruit is intentional. We partner very exclusively with K–12 schools that have a diverse population. We rely on concentric circles ... with families in the community, paras, [and] school staff." (Harriet, BEI administrator)

Four of the eight BEI residencies leveraged partnerships throughout their local communities to increase recruitment numbers of Black residents. This strategy included recruiting through local religious organizations, local education nonprofits, local community colleges, and alumni networks of local high schools for graduates who had obtained undergraduate degrees:

"We've also looked to our community groups— such as church groups, City Year, NYC Men Teach, and to people from our own community who went to our high schools and now have graduated from college." (Leeza, BEI Administrator)

A good example of successful recruiting through a local college was the STEM summer camp that Danbury organized for middle school students of color. Using BEI funds, they awarded 12 fellowships to undergraduates to teach at the camp, hoping that they would "fall in love" with teaching (Andre, BEI Administrator). Andre reflected on the reasons why Danbury has succeeding in increasing its pool of Black residents:

"BEI funding has allowed us to invest in a vision and strategy for increasing Black residents where otherwise we might not have felt the financial freedom to do so, or [taken] the risk to." (Andre, BEI Administrator)

Using high-touch, responsive practices in recruitment

Five of the eight residencies focused on developing individual relationships with prospective residents and providing them with consistent, proactive support throughout the application processes. Residency staff met with prospective residents individually; they called and texted with them to answer questions, and helped them complete applications and prepare for interviews. Robert, a BEI Administrator, emphasized the need to reframe traditional recruitment approaches from numbers to supporting applicants from "start to finish":

"We are able to have "interest" meetings ... [where] people [can] see this is a program that cares about me and isn't out to just give me a license. Our team is really committed to caring for our residents and showing that their humanity is honored." (Matteo, BEI Administrator)

Although BEI Administrators did not talk about being intentional about the identities of their recruiters or residency staff, residents were motivated to apply when they identified with the person recruiting or recommending the program, especially if the person was Black. Seeing and conversing with other Black people employed at the residencies tended to build prospective residents' comfort and trust in the residency's mission, and motivated them to apply and enroll. Delilah, a resident, considered a number of teacher residency options before she decided to join her program. Reflecting on her decision-making process, she commented:

"I chose this [program] because there was more Black support. I felt shunned at the other [residency program] ... At this program, there were more people of my color, so they understood me more." (Delilah, Resident) Black residents were also drawn to residencies with a clear anti-racist or social justice orientation. Residencies that succeeded in attracting Black residents by promoting these orientations did so not only on their websites and in their recruitment materials, but also through conversations with prospective residents, so that they could trust that the residency really "cared about moving forward" on social justice issues, rather than just "the performance of moving forward" (Delilah, Resident). Bianca, another resident, notes how this consistency helped build trust in the program's approach:

"I browsed around the school's website and researched the school a bit. And, that was the thing that kept popping up – anti-racism, anti-racism – and I was like, 'Oh, wow, this school seriously seems to care about supporting students and teachers of color.' So I was really interested in that." (Bianca, Resident)

While BEI Administrators did not talk about this, residents highlighted their motivations to pursue careers as teachers and frequently named the opportunity to give back to their communities as one of the most important motivators to join a program. For example, Yohanna, a Resident, describes his motivation to give back:

"And really after everything what went on this past summer and this past year with the George Floyds and the Breonna Taylors and everything like that, you know. I just felt like this would be a good way for me to give back to the community that raised me and brought me up to be the man that I am. So, that's kind of my main motivation." (Yohanna, Resident)

Historically Black Colleges and Universities (HBCUs): A missed opportunity

In the SY2020 recruitment season, three of the eight BEI residencies recruited at HBCUs. Featured at the beginning of the Findings section, the Danbury residency placed HBCUs at the center of their recruitment strategy and resulted in the team's meeting their targets for Black resident enrollment even during the pandemic:

"Number one reason is an increased focus among recruiting in places that are high- percentage persons of color or black undergrads. We always recruited at HBCUs, but that went from part of our strategy to our main strategy." (Andre, BEI Administrator) Several participants noted that residencies were "losing great teachers" (Gabby, Mentor) because they were not recruiting at HBCUs. Similarly, Sofia, a resident, suggested that her residency could recruit more Black teachers if they were to advertise locally, to community programs, and to HBCUs. Only three of the eight BEI residencies recruit at HBCUs, which might be a missed opportunity worth further exploration.

Promoting financial support

The financial costs of pursuing a teaching career are significant, as noted in the literature review and in the quantitative findings. Every \$10,000 increase in stipend leads to a 4 percentage point increase in the number of Black residents in a program. This finding is supported by the emphasis that residents placed on the stipends and scholarships in deciding to join BEI programs:

"One of the major things that attracted me, they had a stipend for the duration of the study and also had different scholarships that supported the academic side of it ... I am a first generation [college student]. Only child in the family that's educated. If I didn't have financial support, I'd still be a TA. They gave me a pathway. Now I will start on my doctorate too." (Sara, Graduate)

Residents explained that more Black teachers would have applied had they known about the scholarships and stipends available to them, indicating that residents might need to focus more of their efforts on recruiting from diverse organizations and highlighting the availability of financial support.

Retention

The introduction of BEI is associated with an increase in the number of graduates

To explore whether BEI residencies were successful in improving graduation and hiring rates for Black educators, we first conducted a descriptive examination of variability in graduation rates among programs and over time. We then compared graduation rates before and after BEI for the original eight BEI programs; we are unable to examine pre- and post-BEI graduation rates by race because graduation rates were only disaggregated by race from 2020 onward, coinciding with the post-BEI period. We were, however, able to examine changes over time in graduation rates for Black residents within BEI programs, as well as factors that may explain those changes, such as differences in budgetary allocations and other program strategies.

Figure 8a shows trends in the proportion of graduates who are Black for each of the 6 BEI residencies with data on Black graduates from 2020 through 2021. Data for 2022 graduation are not yet available and graduation data was not disaggregated by race before2020. Most residencies, with the exception of Glassboro, show declines in the percentage of graduates who are Black, which ranges from 20-40%. Figure 8b shows that the number of Black graduates is increasing in Asbury, Bayonne, and Glassboro, and holding steady or declining elsewhere, suggesting that the proportion is dropping in some residencies because they are graduating more residents overall of all races. Glassboro appears to be doing particularly well in increasing numbers and proportions of graduates who are Black.

Figure 8a: Proportion of graduates who are Black by year, BEI program



Figure 8b: Number of Black graduates by year, BEI programs*



Source: NCTR Annual Data 2020-2022

*Data was missing for Caldwell; Franklin no longer has a residency program.

Because graduation was not disaggregated by race before the start of BEI in 2020, we cannot determine if the introduction of BEI is associated with an increase in Black graduates or graduates of color. However, we do know that the introduction of BEI is associated with an increase in the number of graduates overall. BEI residencies already had on average, 37 more graduates than non-BEI residencies. After the BEI was introduced, this number increased on average by about 21 Black graduates. This finding is not statistically significant, but has a p-value of 0.13. In light of the small sample, that relationship may be worth further investigation. We also investigated what program features may explain differences among programs and over time in the graduation rate for Black residents. Table 9 shows the results of a regression of the proportion of graduates who are Black and the number of Black residents on program features. Each strategy is a dichotomous variable, coded as 0 if the strategy is absent and 1 if it is present. The "Constant" term represents the baseline average if none of these strategies were present. In the row corresponding to each strategy, the coefficient is the amount each strategy is predicted to add or subtract from each dependent variable. Most are not statistically significant and many are negative. In fact, the pre-residency summer program has a statistically negative association with the proportion of graduates who are Black. This may be spurious or reverse causation and might merit further investigation.

Table 9: Black resident graduation outcomes and BEI program features

	1	2
Variables	Proportion Black graduates	Black graduates
Emergency funds	-0.02	6.50
	(0.13)	(15.36)
Training costs and stipends for Black mentors	-0.19	14.86
	(0.11)	(13.41)
Test prep for Black residents	-0.14	-1.64
	(0.08)	(10.06)
Pre-residency summer	-0.45*	8.36
	(0.20)	(23.94)
Recruiters	0.10	-4.50
	(0.13)	(15.36)
Constant	0.52***	4.64
	(0.13)	(16.08)
Observations	14	15
R-squared	0.54	0.31

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

An average of 14 additional graduates of BEI residencies were hired in Title I schools and 24 additional graduates were hired in partner districts after BEI was implemented.

Next, we explored whether programs participating in BEI increase the hiring rates of Black educators in partner districts and Title I schools. Again, because data were not disaggregated by race before 2020, we are unable to analyze whether hiring rates for Black educators in partner districts and Title I schools changed from pre- to post-BEI. However, we were able to analyze changes in hiring rates for all residents in BEI residencies. Then, we analyzed changes over time during the BEI period for BEI residencies by using descriptive trend analysis and regression analysis including school year as a covariate and interaction term. Likewise, because hiring data was not disaggregated by race before the commencement of BEI in 2020, we can only test whether the overall number of graduates hired in partner districts and Title I schools changed in the original eight BEI programs. Table 9 shows the relationship between the period after BEI began and graduates hired in Title I schools (Column 1) and in partner districts (Column 2). Both coefficients are positive and the coefficient for graduates hired in partner districts is statistically significant, meaning that an average of 14 additional graduates of BEI residencies were hired in Title I schools and 24 additional graduates were hired in partner districts after BEI was implemented.

Table 10: Graduates hired before and after BEI

	1	2
Variables	Graduates Hired in Title I Schools	Graduates Hired in Partner Districts
After BEI	13.56	23.61*
	(11.23)	(12.62)
Constant	35.11***	35.05***
	(7.46)	(7.85)
Observations	34	31
R-squared	0.04	0.11

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10
Figures 9 through 12 show trends over time in both proportions and numbers of graduates who are Black and who are placed in partner districts and/or Title I schools. The patterns are fairly consistent regardless of how the outcome is specified. Danbury and Glassboro are placing both increasing numbers and proportions of graduates in these schools, while Bayonne is placing a steady proportion but rising number of graduates.



Figure 9: Proportion of Black Graduates to all graduates hired in partner schools from SY 2020-2021

School Year



Figure 10: proportion of graduates hired in Title I schools who are Black

Figure 11: Number of graduates hired in partner districts who are Black





Figure 12: Number of graduates hired in Title I schools who are Black

School Year

As with the previous outcomes, we also investigated whether changes over time and across programs in hiring rates were associated with particular strategies, summarized in Table 11. Few strategies had statistically significant associations with outcomes. Notably, many strategies were negatively associated with the proportion of Black graduates but positively associated with numbers of Black graduates.

Table 11: Program strategies and placement of Black residents, BEI programs

	1	2	3	4
Variables	Black proportion of graduates hired	Proportion of graduates hired in Title I schools who are Black	Number of Black graduates hired in partner districts	Number of Black graduates hired in Title I schools
Emergency funds	-0.01	0.03	6.50	6.50
	(0.12)	(0.13)	(13.68)	(15.23)
Training costs for Black residents	-0.17	-0.23*	23.75	12.00
	(0.11)	(0.11)	(12.49)	(13.29)
Test prep for Black residents	-0.18*	-0.15	4.25	-2.00
	(0.09)	(0.08)	(9.67)	(9.97)
Pre-residency summer	-0.25	-0.29	25.25	16.00
	(0.20)	(0.20)	(21.63)	(23.73)
Recruiters	0.04	0.10	-7.50	-4.50
	(0.12)	(0.13)	(13.68)	(15.23)
Constant	0.55***	0.53***	-1.25	5.00
	(0.13)	(0.13)	(14.77)	(15.93)
Observations	12	14	12	15
R-squared	0.49	0.48	0.54	0.21

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

Next, we examined whether BEI programs overall were more successful than non-BEI programs at placement and retention of Black educators, whether there was variability between programs or over time within BEI in these outcomes, and whether such variability could be explained by programmatic interventions. Trends within BEI programs on these outcomes are noted above in Figures 9 through 12; there was not sufficient data to plot trends or investigate programmatic interventions for retention rates due to missing data.

Table 12 shows the results of a series of regressions on placement and retention outcomes on whether or not a program was one of the original eight BEI programs. Results are similar regardless of comparison groups. BEI programs have large and statistically significant positive effects on placement of Black residents, but there is insufficient data to investigate their effects on retention. While the quantitative data was insufficient to investigate the effects of BEI strategies and supports on retention of Black educators (e.g., missing data; small sample sizes), interviewees described the strategies that made them feel supported throughout the program.

Table 12: Placement and retention of BEI versus non-BEI programs

Comparison Group	All residencies		Excluding	residencies that later	joined BEI	
Variables	Number of Black graduates hired in partner districts	Number of Black graduates hired in Title I schools	One-year retention rate- Black or African American	Number of Black graduates hired in partner districts	Number of Black graduates hired in Title I schools	One-year retention rate- Black or African American
Original BEI	12.77***	10.32***	-0.15	15.84***	13.54***	0.05
	(2.35)	(2.18)	(0.18)	(3.41)	(3.15)	(0.41)
Constant	4.14***	4.14***	0.94***	1.08	0.92	0.73*
	(1.19)	(1.20)	(0.12)	(2.36)	(2.30)	(0.36)
Observations	47	50	18	25	28	10
R-squared	0.40	0.32	0.04	0.48	0.42	0.00

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

Financial support is a prerequisite for entry into the program and plays a crucial role in retention

In our interviews, we heard how important these financial supports were to participants' retention in the program. Residents focused on the stipends, noting that while these were essential to entry to the program, they were not enough to live on. BEI administrators highlighted emergency funds as a means to supplement the stipend. And both residents and administrators noted that money and support for licensing enabled residents to obtain their licenses:

"We use BEI funding to pay for black residents testing fees and supports – tutoring, retakes, practice exams. The other biggest piece is our resident emergency fund ... Every black resident can access the emergency fund. Anywhere in America a 23,000 salary is living in poverty. We can ensure that basic needs are met." (Linda, BEI Administrator)

Administrators shared many examples of the ways in which emergency funds made the difference between "staying in the program or quitting" (Rizwana, BEI Administrator). Residents used the funds for paying rent, a utility bill, or an unexpected expense such as a car being towed:

"I cannot say enough about how amazing those emergency funds are and what 250 dollars can do for someone who is on the verge of having their lights cut off. That money saves them from mental stress and trauma." (Robert, BEI Administrator) And while residents appreciated that there was a stipend, they noted that it was not enough to live on. It is also not available to the residents throughout the program. Once a resident enrolls in the residency program, the stipend is only applicable during the semester, even if there is an initial orientation in the summer. After completing the program, teaching jobs are not available during the summer. In committing to the program therefore, residents are foregoing two summers' income from teaching:

"We got \$3000 a semester as a stipend, which is definitely not enough for the cost of rent. I've had to take on a roommate and I took out a loan ... they're not offering a summer school [job] and we won't get our first paycheck till mid-September. And so, like, in addition to doing this full year of teaching without pay and being a student, and now I have to make it through the summer with no job, and then go into the school year and 15 more days wait." (Lila, Resident)

While financial support is crucial for entering and staying in the profession, as noted in the literature review, a number of factors create an enabling environment for the retention of Black teachers. These include teachers' perceptions of their own preparedness to teach and hiring principal's perceptions of residents' preparation to teach in their districts (Carver-Thomas et al. 2017; Grooms et al., 2021; Ingersoll et al., 2014). In addition, support from mentors enables residents to bridge their coursework and clinical experience. Next, we discuss residents' and principals' perceptions of program preparation, followed by a discussion of residents' experiences with their mentors.

Program preparation

Perceived effectiveness

To investigate the relationship between perceived effectiveness of Black educators in the BEI programs and program strategies, we examined resident, graduate, and principal ratings of preparedness to effectively serve as a first-year teacher or teacher of record. We compared those ratings over time and for Black residents compared to all other residents for the original eight BEI programs against the remainder of the NCTR network.

Table 13 shows residents' assessment that their program is preparing them to be an effective teacher over time, for Black residents versus all other residents, for BEI programs versus the rest of the NCTR network.

Year	BEI, all other residents	BEI, Black teachers	Rest of network, all other residents	Rest of network, Black residents
2018	3.59		3.38	
2019	3.45		3.41	
2020	3.41	3.2	3.5	3.28
2021	3.38	3.26	3.48	3.26
2022	3	2.67	3.58	2.79

Table 13: Resident assessment of preparation to teach for Black versus all other residents, BEI versus rest of network, over time

In general, resident assessments of preparation are trending downward. They are lower for Black residents than all other residents and are slightly lower for BEI programs than for the rest of the network. However, BEI programs do appear to have a smaller and shrinking gap between Black and non-Black residents in their assessment of preparation to teach, with a notably steep drop for all groups in 2022.

Table 14 shows similar results for graduates. In general, graduates' assessments of their preparation to be effective teachers is trending upward, and for all residencies, Black graduates' assessment of their preparation to be effective teachers is increasing more rapidly so that they now outpace other groups of graduates.

Table 14: Graduate assessment of preparation to teach for Black versus all other residents, BEI versus rest of network, over time

Year	BEI, all other graduates	BEI, Black graduates	Rest of network, all other graduates	Rest of network, Black graduates
2018	3.6		3.4	
2019	3.44		3.4	
2020	3.43	3.33	3.32	3.1
2021	3.44	3.49	3.4	3.47

Finally, we compared assessments of preparation to be effective teachers among hiring principals; this data was not disaggregated by resident race because principals' surveys are not linked to specific residents.

Table 15 shows these results; there are generally not large differences between BEI and non-BEI programs on this metric.

Table 15: Hiring principal assessment of preparation of residents to be effective teachers

Year	All BEI	Rest of network
2018	3.59	3.6
2019	3.43	3.32
2020	3.41	3.53
2021	3.39	3.5
2022	3.44	3.44

In order to understand why residents might not have felt prepared to teach, we first analyzed the stakeholder perception survey data related to two questions:

- 1. The coursework provided to residents by the residency program is relevant to my school context and classroom.
- 2. The residency program offers residents a good balance of theoretical and practical strategies to strengthen their effectiveness in the classroom.

Relevant coursework. On average, residents in the BEI program felt that their program coursework was relevant to their school context and classroom (difference of 0.30 on a scale of 1-5 between BEI and non-BEI residencies, p-value for two-tailed t-test=0.27). This survey question remained consistent across the two years of the study and the average score on this question about the relevance of program coursework seems to have improved the most from 2020 to 2021 (3.94 to 4.33).

Theoretical and practical strategies. For the question on the balance between theoretical and practical strategies, Black residents report higher average results than non-Black residents, although the difference is not statistically significant (difference of 0.096, p-value for two-tailed t-test of 0.26).

Clinical preparation. Next, we turned to the interview data to understand resident perceptions of their preparation to teach. We found that BEI residents and graduates felt that their coursework was comprehensive, but it was the clinical preparation that really prepared them to teach because the "culture is different in every school" (Delilah, Resident). The length of the clinical experience increased residents' feeling of being prepared to teach, and in particular, being prepared to teach students of color:

"And I think I just feel so much more confident having that for a year as opposed to like six weeks, just teaching for six weeks and being like, 'Okay you're ready to teach.' And so, I definitely have felt supported in that I'm prepared and ready to go." (Payal, Resident, non-BEI residency)

"Seeing where my students lived and what they needed showed me, as well, [made me want] to put more effort into being an understanding teacher for them." (Sam, Resident, Asbury)

There are several reasons that might have led to Black residents' reports of lower self-efficacy than other residents, declining self-efficacy over time, and lower levels of self-efficacy than graduates. First, participants may have felt there was a mismatch between the values of social justice of the residency and the climate of the schools that residents would work in:

"I'm gonna get contaminated once I start working and I will have to forget about all of this because the system is created in a way that all these practices will be like unsustainable." (Jacob, Resident). This sentiment was echoed by administrators, who wanted to provide residents with a "safe but productive way to fight the system" (Paige, BEI Administrator) but acknowledged that this might be an uphill battle:

"There is a very concerted effort to push back on CRT, and culturally and linguistically sustaining practices (CLSP), and also social and emotional learning (SEL). In some states where our residencies have set up shop, these are kind of bad words right now – they don't want SEL, they don't want CLSP, they definitely don't want CRT." (Keisha, NCTR Administrator)

Second, respondents expressed that there seemed to be a mismatch between coursework, which tends to be traditional, and residency climates, which were more oriented toward social justice. Residents complete graduate coursework through a higher education institution, and BEI administrators noted that, often, this coursework had not changed despite a changing political climate:

"Higher education from a predominantly White institute was not necessarily ready to do the work, or not necessarily ready to know how to respond to that. Bringing it back to [the residency], being able to examine what the leadership looks like, does it reflect those in the community and in the program. What does the curriculum look like and what is being shared with residents? Does that curriculum perpetuate some of the issues that the residents face?" (Robert, BEI Administrator)

Third, some residencies have focused on preparing residents to teach students of color in their districts by organizing neighborhood tours, analyzing district policies, and taking an assets-based approach to their students. Not all residencies, however, were able to integrate this social justice lens throughout the program; their residents may not have felt as prepared to advocate for themselves and for their students. As a result, those residents may not have felt prepared to teach high-need students in their district.

BEI Mentors valued and affirmed residents' identities

On the stakeholder survey, residents were asked if their current or most recent classroom mentor provided them with feedback in a way that valued and affirmed their full identity. Black residents report higher average results than non-Black residents for this question and the difference was statistically significant (mean for Black residents=4.49 out of 5, mean for all other residents=4.40 out of 5, difference=0.09, p-value=0.05). This difference (Black residents reporting more positive survey results than average) was larger for BEI residencies than other residencies although not statistically significant.

The residents told us why this was the case. Residencies are intentional in providing mentoring support and most are able to attract high-quality mentors by offering additional compensation and professional development:

"I was not going through this journey by myself. I was able to ask questions, I was able to watch them as they worked. They were able to support me ... It set me up for success." (Sara, Graduate)

Four of the eight BEI residencies were intentional about mentor recruitment and worked closely with their schools and districts to find effective teachers to work with their mentors. We did not see a distinct pattern in the interview data that might tell us whether a racial match was essential to the mentor-resident relationship. In some cases, residents had a meaningful relationship with their mentor regardless of their race. In others, residents noted how meaningful it was to have a Black teacher. Residents who were matched with Black mentors talked about feeling "empowered":

"I feel like it helped to see someone who looked like me in a sense, but also someone who was mentoring me. Like I could see myself as being a first-grade teacher and knowing like, okay someone else who is actually a good teacher, knows what she's doing, is organized, is able to advocate for the Black students in her classroom. So, I think it was very empowering." (Max, Resident)

Alimatu, one of the graduates interviewed, talked about the "power dynamic" she faced in having a White mentor in a school where she was the only Black teacher and this might be a topic for further exploration:

"My mentor was White, but obviously she knows the program that she signed up for. But that power dynamic that you have with a White mentor being a Black resident in a school populated with just White teachers, servicing students who are not just Black, but Brown, White, you know, like different colors." (Alimatu, Graduate) While some residencies would love to provide a racial match for their mentors, they note that there is a lack of experienced Black teachers in the school systems:

"They do not typically identify teachers of color [as mentors]. We have had historically white teachers as mentors. It should be a leadership development pathway for mentors. I would like us to be more adamant about making sure our mentors reflect our resident pool." (Matteo, BEI Administrator)

Work conditions and climates differed between residencies and their partner schools

Black residents often face adversarial or unsupportive school environments leading to a high turnover rate for Black teachers (Amos, 2020; Campoli, 2017; Griffin & Tackie, 2016). In contrast, a positive school climate refers to an environment where a school's norms, values, and expectations create an environment where teachers and students feel socially, emotionally and physically safe (Cohen et al., 2009). Although residents found that residency climates were affirming, they were frustrated by the school climates they experienced during clinical preparation. Residents and administrators in this study noted that when structured appropriately, affinity groups provided a space for residents to build community and to create spaces for healing as well as learning.

To explore whether residents felt safe and valued during their residency experience, we were able to analyze the questions below from the stakeholder surveys. As noted in the Methods section, we were unable to use all the data from the surveys since the questions had changed over the years and much of the data was missing:

- My program's assessment system fairly assesses my performance.
- My school leader makes me feel comfortable approaching them with questions or concerns.
- My coursework instructors (includes residency program staff, university faculty, etc.) make me feel comfortable approaching them with questions or concerns.

We found that Black residents had higher average scores on the questions related to assessment and school leadership and slightly lower averages for the question about approachability of instructors. None of these differences were statistically significant.

We were able to identify dimensions, which residents characterized as positive or negative, of the BEI program and the school where residents completed their clinical experience. For most residents, the residency climate was affirming, and the school climates varied.

By and large, BEI residency programs are characterized as having positive, healthy climates. The most consistent indicator of climate among residency program participants, graduates, mentors, and administrators was the level of support and sense of community that the programs offered. For residency programs operating with a cohort model, community was frequently named as a positive factor for feeling supported. Residents highlighted the following features that created a positive residency climate:

- 1. There was diversity in the composition of staff, faculty and other residents.
- 2. Conversations around race and identity were centered in the coursework and throughout the BEI program.
- 3. There was a sense of belonging to a community, often in a cohort setting.
- 4. Leaders were viewed as supportive and approachable.
- 5. Residents felt emotionally safe even in difficult conversations about equity and race.
- 6. Residents felt supported throughout the program, including in job placement at the end of it.

The following quotes reflect how BEI residents felt seen and supported in their residency program:

"And even now with the program coming to an end we're like, 'Okay, we're almost there family, just keep pushing like involving each other' ... If something wasn't going right, we all tried to motivate each other. So, that 'family dynamic' is very much there within the residency program. As far as like the teacher in the school I work with, the teacher I work with, she's very much like a mother to me. The school, not as much, but she's very, like protective of me in those instances." (Sam, Resident) "The only way that's I've been able to show out as a Black teacher is just being a Black teacher and being honest about being a Black teacher and being a Black woman teacher. So, that's not necessarily something that you can be taught, it's not in a textbook. But I do feel like the level of support I've had allows me to get to that mindset where I'm not going to hide being Black because I realize how important it is to my students to be Black." (Payal, Resident)

However, lack of diversity in some of the residencies stood out for the residents because it didn't reflect the diversity of the communities some of the residents were hoping to teach in. David, a graduate, noted that faculty in his program were White and a more diverse staff and faculty would be needed if the program is to meet the needs of the students they hope to serve:

"They need more Black and people of color professors. And also, bringing in more community guests and leaning more onto the community knowledge, and not just keeping these White people who aren't from the community as a 'know all – be all' over the program. Because, why are these suburban and country White women teaching me how to work with my community where they've never stepped foot in it?" (David, Graduate)

Residents specially noted the importance of diversity in leadership positions, which contributed to a feeling of safety, or lack thereof:

"I find that to be very important because, if I can't rely on my director or something, or I can't come to my director with certain things because I feel like maybe I'll be discriminated against, or I'm not sure what they think about Black Lives Matter, for example, then I mean, I don't know, I'm not sure if I would join a program ... so effectively recruit and support Black residents, I just think there needs to be more Black people in leadership." (Payal, Resident)

The lack of diversity in some residency programs also meant that residents sometimes felt stereotyped:

"I think my program can't assume that every Black person is the same, if that makes any sense. Like, there's no one spokesperson for every single Black person in America. Especially when all like the racial tension started, like 'Oh I know you can relate.' That's not necessarily true." (Varud, Resident) Overall, though, residents noted that they felt supported in the residency program but felt less so in their school environments. While the residency curriculum emphasized cultural responsiveness, the school curricula and environment did not always reflect that climate, which led to residents feeling frustrated:

"When I walked into the school, I was in complete culture shock because I had looked up the diversity of the student population and the student population was not indicative of the teachers. So, when I saw all White teachers I was like, 'What did I just do!!?' ... I don't even understand why this program would even put me here knowing that I'm the only ... person of Color in this building, I look like the help. And so, do the students see me as the help?" (Alimatu, Graduate)

Just as residents pointed out the importance of diverse leadership in the residency programs, they noted that a lack of diversity in their school leadership had similar consequences. Cam recounted an incident where the White principal in his school summoned him from his classroom because a White parent had a complaint. Cam did not feel safe in this environment and did not feel that he had been treated fairly:

"And at the end of the day I feel like how people are treated comes from the head. So, if you're the head and you're not – you can't cover me, I feel like I'm in a loss of a situation if I came to you and another parent cussed me out that you would just have their back because you didn't listen to my side of the story." (Cam, Resident)

Affinity groups

When designed to meet the needs of Black residents, affinity groups provide a space for residents to reflect on and grapple with their experiences in the program, including the often-hostile climates they faced in their schools. When they hadn't worked, residents noted that there weren't enough Black educators to support the affinity groups, or that they were being asked to participate in an affinity group, as an add-on activity to an already full workload:

"One of my residents who's a Black male was like – 'I get it, but I'm the only Black guy there, so I still don't feel like it's affinity for me.' Of course that's anecdotal and just one person, but it's indicative of a larger issue ... you want to have the same space, but is it really the same space?" (Keisha, NCTR Administrator)

Design elements that addressed barriers to participating and were focused on responding to residents' needs included:

- 1. Creating a balance between ownership and support such that residents set the agenda and direction for the group and residencies provided the resources they needed.
- 2. Creating 'navigating pairs' where a Black graduate was paired with a Black resident within the affinity group, in order to provide a safe space for support.
- 3. Compensating alumni who were engaged in leading sessions for the affinity group.
- 4. Using the affinity groups to build capacity to advocate for change.
- 5. Creating time during coursework for affinity groups, so that time wasn't a barrier to participate.
- 6. Using the affinity groups as a learning community, enabling residents to learn more about topics of interest, including career pathways.

Here are some quotes that illustrate the insights about Affinity listed above.

"In our Affinity Groups, because our leader is a Black woman ... we call her Mama. She supports us and she uplifts us. Just today, a couple of residents were having a hard time. She said, 'Okay, I'll call you after this seminar.' And things like that are what we need as Black women, as Black educators, to succeed." (Payal, Resident)

"Providing that space where they can grapple with what is happening in their schools and doing that with their cohort members. An alumni told me that they would not have survived without that space." (Linda, BEI Administrator)

Discussion

As we noted at the beginning of this report, this was an exploratory study to identify promising strategies for recruiting and retaining Black educators in the NCTR-funded BEI residency programs. While we identified some promising strategies, we also identified avenues for further study, particularly where we had insufficient data or where participants highlighted areas for growth.

Resident Recruitment and Selection

Overall, we found that residencies had focused their efforts on resident recruitment and selection. Getting Black educators interested and enrolled in the BEI programs was an important first step in the journey towards equitable residencies. We found that BEI funding enabled residencies to focus their attention on reaching and recruiting more Black educators than other residencies in NCTR's network. They set more ambitious goals for recruiting Black educators and were consistently able to recruit larger numbers and proportions of Black residents compared with other residencies in the NCTR network. Our quantitative analyses revealed a number of positive associations between enrollment of Black educators and recruitment and retention strategies funded though the BEI program. For example, having a paid recruitment professional on staff was positively associated with increased enrollment of Black educators, as was increasing stipends for the Black teacher residents in the programs.

BEI programs used different strategies to recruit a higher number of Black educators. While not all programs implemented each strategy listed below, overall, BEI programs focused their recruitment efforts on one or more of these three broad strategies:

- Providing and emphasizing the financial benefits of enrolling in the program;
- 2. Identifying and partnering with organizations with highpotential, diverse membership;
- 3. Using high-touch, responsive practices in their recruitment, such as following-up with potential applicants individually.

These strategies address some of the barriers discussed in the literature review. The first barrier is financial. The high cost of graduate programs combined with low teacher salaries can be significant barriers to entry into the profession. BEI programs were able to mitigate some of these barriers by providing scholarships for graduate coursework as well as stipends. Most were also able to provide funding for teacher licensing exams, which can prove to be another barrier to entry into the profession.

Focusing recruitment efforts on community organizations, community colleges, HBCUs and partner schools also helped residencies recruit a higher number of Black residents. This partnership model enabled more word-of-mouth recommendations by alumni, principals and mentors and Black residents noted that they joined the programs because another Black educator had recommended the program to them.

Five of the eight residencies focused on developing high-touch, responsive recruitment practices by developing individual relationships with prospective residents and providing them with consistent, proactive support throughout the application processes. Seeing and conversing with other Black people employed at the residencies tended to build prospective residents' comfort and trust in the residency's mission, and motivated them to apply and enroll. Residents were also drawn by clear anti-racist or social justice orientations of some residencies especially when this seemed to be authentic.

Residency Year Experience

Residencies worked hard to center culturally responsive practices and to create a safe and supportive environment. They worked closely with partner schools to provide regular training and support to mentors and created structures to support a more equitable environment, such as affinity groups, where Black residents could share their experiences and support each other.

Mentor Recruitment, Selection, and Support

Four of the eight BEI residencies intentionally created pathways for graduates of their programs to become mentors and created opportunities for both residents and mentors to learn about each other before they were matched. However, residency administrators acknowledged that there were too few experienced Black teachers in the schools, and recruiting Black mentors to work with the Black residents was difficult. This is not surprising, given that just 7% of the teaching workforce is Black (National Center for Education Statistics, 2022). Questions to explore for a future study are: 1) What role does racial matching play in residents' experiences of the residency and school environments and their preparation to teach? 2) What are some innovative practices for providing a career ladder for Black teachers to become teacher leaders and mentors?

Considerations for the Future: NCTR

We asked participants in the study for their suggestions for supporting Black educators and reviewed research studies on those topics. We offer the following considerations for the future, for NCTR and residencies interested in recruiting and retaining Black educators.

Focusing efforts on retention

We noted in the literature review that the number of Black teachers has been increasing nationwide due to the focused efforts of federal, state, and private organizations such as NCTR (Ingersoll et al., 2021). However, while the number of Black students is increasing, the proportion of Black teachers joining the profession is lower. In addition, higher numbers of Black teachers are leaving the teaching workforce; indeed, Black teachers leave that profession at higher rates than do teachers from other racial groups (Campoli, 2017). Black teachers leave because they feel underprepared, undervalued, or experience hostile or unsupportive work environments (Amos, 2020; Campoli, 2017; Griffin & Tackie, 2016).

It is vital, therefore, to continue efforts to recruit more Black teachers and to invest in retaining them. How might NCTR extend its attention to retention efforts in addition to its focus on recruitment? One possible way to do this is to focus increasing support around partnering and designing for equity with communities and schools (see NCTR's Levers for Equitable Teacher Residencies). How might residencies partner with Black communities to co-design retention strategies? How might residencies partner with schools, school districts and other partners to identify promising strategies and areas of growth for increased retention? Certainly, all BEI administrators aspired to select schools that committed to creating an equitable and inclusive environment for their residents, but not all were able to do so. How might residencies find ways to select school sites that would be supportive of Black teachers? Discussion of some considerations follows. In addition to these suggestions, an important step would be gathering additional insights from residencies, their partner schools and importantly, from the Black communities that residents will serve.

Collect and report data by race

While placement and retention in school districts and especially in Title I schools is an important goal for each residency, not all residencies in NCTR's network collect or report placement data by race or ethnicity. Similarly, not all residencies collect disaggregated data on applications to the program, making it challenging to assess what proportion of potential Black applicants completed the application-through-placement cycle. Raising awareness and providing support for this data collection could inform what we know about promising strategies for the recruitment and retention of Black educators.

Support and pilot transformative racial affinity groups

Unsurprisingly, there is a disconnect between the environment created by residencies and the school climates encountered by residents. While affinity groups create a safe space for shared experiences they might also be used more intentionally to advocate for change.

The Black Teacher Project for example, used the liberatory consciousness framework to create different types of racial affinity professional development, focused on supporting teachers to recognize and challenge structural inequities (Mosley 2018). NCTR might consider investing and supporting research and pilots of different types of affinity groups. For example, might affinity groups look different for beginning and mid-career Black teachers (see Bristol, et al., 2020 for a study on supporting pre-service, Black male teachers through an affinity group)? Might there be opportunities for Black teachers to create spaces for holistic wellness and healing and other spaces for professional development and advocacy?

Support learning communities around key retention barriers

We found a disconnect between the traditional coursework offered through traditional higher education institutions and the culturally responsive approach taken by residency staff. NCTR already has a "social justice pod" that has been discussing the issue of alignment between climate of the schools and coursework offered through the residency programs. It might also explore the development of learning communities focused on aligning residency coursework with the transformative goals of the residency programs. BEI Administrators noted how much they had learned from other residencies in the program. Similarly, NCTR administrators highlighted the importance of continuing to learn from its network in order to distill and share best practices. NCTR already takes a learning and improvement approach to its work, and indeed, supports several "learning pods" and has been intentional about disseminating promising practices in its network through webinars and roundtables. It might also consider creating spaces for residencies to learn from each other, so that NCTR creates a "generative space" for learning, rather than one where it is positioned as the expert. For example, how have residencies partnered effectively with local communities? How have some residency programs thought about the issue of scale? For example, Danbury's administrator noted that they would like a closer partnership with the school districts they work with so that they could support Black residents and graduates in a more financially sustainable manner. The Bayonne residency on the other hand already partnered closely with its large, urban school district, which enabled it to scale its efforts to recruit and retain Black teachers.

Consider intersectional identities in recruitment and retention efforts

The focus of the BEI funding is on recruiting and supporting Black educators. Three of the administrators we interviewed stressed the importance of considering the intersectional identities of Black educators, so that programs create support and space for these. For example, Leeza, a Caldwell administrator, said that gender differences or learning disabilities might indicate the need for different types of support. Similarly, Robert, a Glassboro administrator, talked about the importance of being more inclusive of intersectional identities of teachers in recruitment and programming efforts. How might NCTR and its partner residencies learn more about the identities of the communities they serve so that they might become more inclusive in both recruitment and retention efforts? For example, some communities might identify as African American rather than Black.

Find ways of supplementing stipends

Study participants noted that the stipends were not a "living wage" and did not even enable them to pay for rent. Program administrators told us that emergency funding was a crucial supplement to this stipend and had made the difference between a resident staying in the program or leaving. NCTR might consider encouraging other residencies in its network to use emergency funds as one means of supplementing stipends. It might also highlight the importance of providing financial support to residents from the start of summer programming through their last summer before beginning teaching full-time in the fall. One way of supporting residents during summer programming could be to recruit and pay them as mentors for the incoming cohort of residents.

Considerations for the Future: Partner Residencies

Hire and engage diverse staff, alumni and mentors for recruitment

Residents and graduates highlighted the importance of hearing from Black educators, including alumni, mentors, and residency staff during the recruitment process. Residencies might explore different ways of including Black perspectives during the recruitment cycle, including hiring Black recruiters, organizing alumni panels, and requesting Black educators within their networks to speak about their experiences as teachers. This might help not only with recruitment efforts but could also be a strategy for bringing together Black graduates and mentors to share resources on leadership pathways and career development.

Consider partnering with HBCUs

While some residencies already partner with local colleges, just three of the eight recruited from HBCUs. Residencies might consider building partnerships with HBCUs as one strategy for recruiting Black educators.

Support career pathways for Black graduates

As the number of Black graduates increases, residencies could be more intentional about supporting career pathways for these graduates. For example, they might work with school leadership to prioritize appointing graduates t as mentors to guide the induction of other Black teachers.

Articulate authentic social justice or anti-racist approaches during recruitment

Programs that resonated most with Black residents and graduates went beyond including buzzwords like "social justice" on their websites. They were able to illustrate to potential candidates that they were focused on addressing the "underlying conditions" that made it difficult for Black teachers to enter and stay in the teaching workforce (Osler, 2016, p. 8).

Create or support racial affinity groups

Affinity groups can provide a space for Black residents to share their experiences and to explore avenues for bringing about change in the school systems. Residencies that do have this social justice approach might consider articulating all the ways in which their programming and support reflected this approach. Other residencies might consider supporting the formation of affinity groups.

Develop closer relationships with schools to partner on equity initiatives

Since there is a disconnect between residency climates and those that Black residents experience in their schools, residencies might consider strengthening their professional relationships with school leadership, including teacher leaders. That way, when residents face difficult situations in their schools, residency staff could work directly with mentors, peers, principals, or others to address the challenges.

Areas for Future Study: Potential, Precision, Power

This preliminary, exploratory evaluation of the BEI rollout at eight pilot sites, has uncovered several areas for further research and evaluation.

As the program grows, long-term outcomes will be defined, measures designed, and data sources will become more readily available; more data will be collected; and larger samples will enable more robust statistical analyses. These robust, precise data will inform the actions of BEI and other residencies that specially seek to recruit and retain highly effective teachers of color.

Continue to monitor BEI long-term outcomes and design actionable program evaluation plans. The BEI initiative is too recent to have substantial evidence on long-term impacts such as graduate self-efficacy and success in the classroom, and particularly retention beyond one year. It is too early to see three-year or five-year retention rates as a result of BEI. Data for one-year retention rates is quite limited, especially disaggregated by race. As the BEI program expands, continuing to monitor these long-term outcomes will be critical for ongoing program evaluation and development efforts. Program administrators will need to ensure that evaluation designs provide for complete data to be collected and disaggregated by race so that they may investigate where in the process disparities arise or persist and make plans to eliminate them. Seize the opportunity to examine causal effects of BEI. Having the chance to conduct a cost-effective, rigorous causation study is rare. Fortunately, the BEI program design presents an opportunity to examine the effects of the BEI intervention (e.g., in a difference-in-differences framework) because programs that adopted BEI later could serve as a natural comparison group for those that had adopted it earlier. Adding participating residents and programs as the initiative grows would also increase sample size, statistical power, and precision of estimated effects.

Conduct cost-benefit analysis of BEI. A complete cost-benefit analysis would also give administrators, NCTR, policymakers, and other stakeholders insights into which strategies and budgetary allocations are providing the greatest return on their investments. Given the resource-intensive nature of the program, variability in program strategies, and expressed need for additional resources (e.g., emergency funds, living-wage stipends), decision makers need data to understand better how they can make the most effective uses of scarce resources relative to cost.

Target specific BEI strategies and residencies with highquality research

Finally, the dual nature of this mixed-methods study has generated several hypotheses that could be further studied using complementary methods. For instance, the preliminary quantitative evaluation indicates several promising strategies for recruitment and retention, such as stipends and paid recruitment professionals. Taking a deeper dive with case studies focused on the specific strategies related to recruitment and retention based on the context of each residency could yield further insights. Similarly, the qualitative analysis has revealed several promising strategies that interviewees found worthwhile, including for example high-touch, responsive recruitment practices, support for mentors and the centering of race and identity into the coursework and support provided by the residency program. Further quantitative research could determine the prevalence and effectiveness of these strategies.

References

Allegretto, S., & Mishel, L. (2019). The teacher weekly wage penalty hit 21.4 percent in 2018, a record high. Economic Policy Institute & Center on Wage & Employment Demographics. <u>https://files.epi.org/pdf/165729.pdf</u>

Amos, Yukari Takimoto. (2020). "Are you gonna take my job away?": Latina bilingual education teachers' relationships with White colleagues in a White racial frame. Urban Education, 55(4) 640–666.

Bland, P., Church, E., & Luo, M. (2014). Strategies for attracting and retaining teachers, Administrative Issues Journal, 4(1). https://dc.swosu.edu/cgi/viewcontent.cgi?article=1086&context=aij

Boston Plan for Excellence (2022). Boston teacher residency impact data. Boston Plan for Excellence. https://www.bpe.org/statistics/

Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. Educational Evaluation and Policy Analysis, 31(4), 416–440.

Bristol, T. J., & Martin-Fernandez, J. (2019). The added value of Latinx and Black teachers for Latinx and Black students: Implications for policy. Policy Insights from the Behavioral and Brain Sciences, 6(2), 147-153. <u>http://dx.doi.org/10.1177/2372732219862573</u>

Bristol, T.J., & Shirrell, M. (2018). Who is here to help me? The work-related social networks of staff of color in two mid-sized districts. American Educational Research Journal, 56.

Bristol, T.J., Wallace, D.J., Manchanda, S. & Rodriguez, A. (2020). Supporting Black Male Preservice Teachers: Evidence from an Alternative Teacher Certification Program. Peabody Journal of Education, 95(5), 484-497, DOI: 10.1080/0161956X.2020.1828690

Camera, L. (2022, March 2). The new federal data shows pandemic's effect on teaching profession. U.S. News. https://www.usnews.com/news/education-news/articles/2022-03-02/new-federal-data-shows-pandemics-effects-on-teaching-profession

Campoli, A. K. (2017). Supportive principals and black teacher turnover: ESSA as an opportunity to improve retention. Journal of School Leadership. 27(5). https://doi.org/10.1177/105268461702700504

Carroll, T.G. (2007). Policy brief: The high cost of teacher turnover. National Commission on Teaching and America's Future. https://nctaf.org/wpcontent/uploads/NCTAFCostofTeacherTurnoverpolicybrief.pdf

Carver-Thomas, D., (2018). Diversifying the teaching profession: How to recruit and retain teachers of color. Learning Policy Institute. https://learningpolicyinstitute.org/product/diversifying-teaching-profession-report

Carver-Thomas, D., & Darling-Hammond, L. (2017). Why black women teachers leave and what can be done about it. In A. Farinde-Wu, A. Allen-Handy, & C.W. Lewis (Eds.), Black Female Teachers: Diversifying the United States' Teacher Workforce (pp. 59–184).

https://learningpolicyinstitute.org/sites/default/files/product-files/Why_Black_Women_Teachers_Leave_CHAPTER.pdf

Chang, Sophia. (2021, November 19). City faces largest-ever lawsuit payout to NYC teachers affected by "discriminatory" certification tests. The Gothamist. <u>https://gothamist.com/news/city-pay-largest-ever-settlement-nyc-teachers-affected-discriminatory-certification-tests</u>

Chu, Y. & Wang, W. (2022). The Urban Teacher Residency Model to Prepare Teachers: A Review of the Literature. Urban Education, 1-13. DOI: 10.1177/00420859221102976

Coffman, A.N. (2014). Teacher Residencies: Redefining Preparation through Partnerships. National Education Association. https://www.nea.org/sites/default/files/2020-07/Teacher-Residencies-2014.pdf

Cohen, J., McCabe, E.M., Michello, N.M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. Teachers College Record, 111(1), 180–213. https://doi.org/10.1177/016146810911100108

Cresswell, J.W., Plano, C.V.L, Gutmann, M.L., & Hanson, W.E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), Handbook of Mixed Methods in Social and Behavioral Research, 209-240.

D'amico, D., Pawlewicz, R.J., Earley, P.M., & McGeehan A.P., (2017). Where are all the Black teachers? Discrimination in the teacher labor market. Harvard Educational Review, 97(1), 26–49. https://doi.org/10.17763/1943-5045-87.1.26

Darling-Hammond, L. (2012). Powerful teacher education: Lessons from exemplary programs. Hoboken: John Wiley & Sons.

Darling-Hammond, L. (2010). Teacher Education and the American Future. Journal of Teacher Education, 61(1-2), 35-47. https://doi.org/10.1177/0022487109348024

Darling-Hammond, L. (2012). Powerful teacher education: Lessons from exemplary programs. John Wiley & Sons.

Darling-Hammond, L. (2000). How teacher education matters. Journal of Teacher Education, 51(3), 166–173. https://doi.org/10.1177/0022487100051003002

DeAngelo, L., Franke, R., Hurtado, S. Pryor, J.H., & Tran, S. (2011). Completing college: Assessing graduation rates at four-year institutions. Higher Education Research Institute, UCLA. <u>https://heri.ucla.edu/DARCU/CompletingCollege2011.pdf</u>

Dee, T.S. (2004). Teachers, Race, and Student Achievement in a Randomized Experiment. The Review of Economics and Statistics. 86(1) 195–210. https://doi.org/10.1162/003465304323023750

Downey, D. B., & Pribesh, S. (2004). When race matters: Teachers' evaluations of students' classroom behavior. Sociology of Education, 77(4), 267–282. https://www.jstor.org/stable/3649390/

Education and Urban Society., 48 (4). https://doi.org/10.1177/0013124514533989

Farinde-Wu, A., Griffen, A.J., & Young, J.L., (2019). Black Female Teachers on Teacher Preparation and Retention. Penn GSE Perspectives on Urban Education, 16(1), 1–16. https://urbanedjournal.gse.upenn.edu/archive/volume-16-issue-1-spring-2019/black-female-teachers-teacher-preparation-and-retention

Fiddiman, B., Campbell, C., Partelow, L. (2019, July 19). Student debt: An overlooked barrier to increasing teacher diversity. Washington: Center for American Progress. Retrieved on April 22, 2022 from:

https://americanprogress.org/wp-content/uploads/2019/07/Teachers-of-Color-Debt-Burden-_-1.pdf?_ga=2.153391352.1130413385.1653596165-35605132.1646838282

Flannery, M.E. (2021). Retired Teachers Still Struggling with Student Debt. National Education Association, April 20, 2021. Retrieved from: <u>https://www.nea.org/advocating-for-change/new-from-nea/retired-teachers-still-struggling-student-debt</u>

Gais, T., Blackstrom, B., Malatras, J., Park, Y.J., (2018). The state of the New York teacher workforce. Rockefeller Institute of Government. https://files.eric.ed.gov/fulltext/ED605617.pdf

Garza, Rubén, & Harter, Rod. (2014). Perspectives from pre-service mathematics and science teachers in an urban residency program: Characteristics of effective mentors.

Gershenson, S., Hart, C. M. D., Lindsay, C.A., & Papageorge, N.W. (2021). The long-run impacts of same-race teachers, Working Paper 25254. National Bureau of Economic Research. http://www.nber.org/papers/w25254

Gershenson, S., & Holt, S. B. (2015). The impact of teacher demographic representation on student attendance and suspensions. IZA Discussion Paper. 9554. http://dx.doi.org/10.2139/ssrn.2708367

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. <u>https://doi.org/10.1016/j.econedurev.2016.03.002</u>

Graham, A., & Erwin, K. D. (2011). "I Don't Think Black Men Teach Because How They Get Treated as Students": High-Achieving African American Boys' Perceptions of Teaching as a Career Option. The Journal of Negro Education, 80(3), 398–416. <u>http://www.jstor.org/stable/41341142</u>

Griffin, A., & Tackie, H. (2017). Through our eyes: perspectives from Black teachers. Phi Delta Kappan, 98(5) 36-40. https://doi.org/10.1177/0031721717690363

Grooms, A., Mahatmya, D. & Johnson, E. (2021). The retention of educators of color amidst institutionalized racism. Educational Policy. 35(2), 180-212. https://doi.org/10.1177/0895904820986765

Guha, R., Hyler, M. E., Darling-Hammond, L. (2017). The Teacher Residency: A Practical Path to Recruitment and Retention. American Educator, 41(1) 31–34. https://learningpolicyinstitute.org/product/teacher-residency.

Hammerness, Williamson, P., & Kosnick, C. (2016). Introduction to the Special Issue on Urban Teacher Residencies: The Trouble With "Generic" Teacher Education. Urban Education (Beverly Hills, Calif.), 51(10), 1155–1169. https://doi.org/10.1177/0042085915618723

Hoffman, J. V., Wetzel, M. M., Maloch, B., Greeter, E., Taylor, L., DeJulio, S., Vlach, S. K. (2015). What can we learn from studying the coaching interactions between cooperating teachers and preservice teachers? A literature review. Teaching and Teacher Education, 52, 99–112. <u>https://doi.org/10.1016/j.tate.2015.09.004</u>

Ingersoll, R. (2001). Teacher Turnover and Teacher Shortages: An Organizational Analysis. American Educational Research Journal, 38(3) 499-534. https://doi.org/10.3102/00028312038003499

Ingersoll, R. M., Merrill, L., & May, H. (2014). What are the effects of teacher education and preparation on beginning teacher attrition? Philadelphia, PA: University of Pennsylvania, Consortium for Policy Research in Education. https://www.cpre.org/sites/default/files/researchreport/2018_prepeffects2014.pdf

Ingersoll, R., & May, H. (2011). Recruitment, Retention and the Minority Teacher Shortage. Consortium for Policy Research in Education. Retrieved from https://repository.upenn.edu/gse_pubs/226

Ingersoll, R., Merril, E. & May, H. (2014). What Are the Effects of Teacher Education and Preparation on Beginning Teacher Attrition? Research Report (#RR-82). Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania. Retrieved from: https://www.cpre.org/sites/default/files/research-report/2018_prepeffects2014.pdf

Ingersoll, R., Merrill, E., Stuckey, D., Collins, G., & Harrison, B. (2021). The demographic transformation of the teaching force in the United States. Education Science, 11(5), 234. https://doi.org/10.3390/educsci11050234 Ingersoll, R.M., Merrill, E., Stuckey, D., & Collins, G. (2018, October). Seven trends: The transformation of the teaching force (Updated). CPRE Research Reports. https://repository.upenn.edu/cpre_researchreports/108

Irwin, V. et al., (2021). Report on the condition of education 2021 (NCES 2021-144). U.S. Department of Education. National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021144

Jones, R., Holton, W., & Joseph, M. (2019). Call me MISTER: A Black male grow your own program. Teacher Education Quarterly, 46(1), 55–68. https://www.jstor.org/stable/26558182

Lee, A., Henderson, Dawn, X., Corneille, M., Morton, T., Prince, K., Burnet, S., & Roberson, T. (2022). Lifting Black student voices to identify teaching practices that discourage and encourage STEM engagement: Why #Black teachers matter. Urban Education, Online First, 1–33. <u>https://doi.org/10.1177/00420859211073898</u>

Lee, S. W. (2018). Pulling back the curtain: Revealing the cumulative importance of high-performing, highly qualified teachers on students' educational outcome. Educational Evaluation and Policy Analysis, 40(3), 359–381. https://doi.org/10.3102/0162373718769379

Madkins, T. C. (2011). The Black teacher shortage: A literature review of historical and contemporary trends. The Journal of Negro Education, 80(3), 417–427. http://www.jstor.org/stable/41341143

Matsko, K.K., Ronfeldt, M., Nolan, H.G. (2022). How Different Are They? Comparing Teacher Preparation Offered by Traditional, Alternative, and Residency Pathways. Journal of Teacher Education, 73(3). <u>https://doi.org/10.1177/00224871211015976</u>

Miller, B. (2017, October 16). New federal data show a student loan crisis for African American borrowers. Center for American Progress. https://www.americanprogress.org/issues/education-postsecondary/news/2017/10/16/440711/new-federal-data-show-student-loan-crisis-african-american-borrowers/

Mitchell, A. (1998). African American teachers: Unique roles and universal lessons. Education and Urban Society, 31(1), 104-122. https://doi.org/10.1177/0013124598031001008

Mosley, M. (2018). The Black Teacher Project: How racial affinity professional development sustains Black teachers. Urban Review, 50, 267-283. https://doi.org/10.1007/s11256-018-0450-4

NAEP. (2015). Mathematics and reading assessments. The Nation's Report Card. https://www.nationsreportcard.gov/reading_math_2015/#?grade=4.

National Center for Education Statistics. (2022). Characteristics of Public School Teachers. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Retrieved March 21, 2022, from https://nces.ed.gov/programs/coe/indicator/clr

Osler, J. (2016). Beyond brochures: Practicing "Soul Care" in the recruitment of teachers of color. San Francisco: San Francisco Teacher Residency. Retrieved from: <u>http://www.wcstonefnd.org/wp-content/uploads/2016/12/SFTR-SoulCare-Final1.pdf</u>

Papay J. P., West, M.R., Fullerton, J. B., & Kane, T.J. (2012). Does an urban teacher residency increase student achievement? Early evidence from Boston. Educational Evaluation and Policy Analysis, 34(4),413–434. https://doi.org/10.3102/0162373712454328

Partelow, L., Spong, A., Brown, C., & Johnson, S. (2017, September 14). America Needs More Teachers of Color and a More Selective Teaching Profession. Retrieved May 23, 2022 from https://www.americanprogress.org/issues/education-k-12/reports/2017/09/14/437667/america-needs-teachers-color-selective-teaching-profession/

Rockman et al. (2018). New Visions for Public Schools – Hunter College Urban Teacher Residency Project. A different, more durable Model. Retrieved from http://rockman.com/docs/downloads/TOPXCombinedReport_10.23.18-1.pdf

Roegman, R., Pratt, S., Goodwin, A. L., & Akin, S. (2017). Curriculum, social justice, and inquiry in the field: Investigating retention in an urban teacher residency. Action in Teacher Education, 39(4), 432–452. <u>https://doi.org/10.1080/01626620.2017.1300956</u>

Ronfeldt, M., (2021). Links among teacher preparation, retention, and teaching effectiveness. National Academy of Education. https://3e0hjncy0c1gzjht1dopq44b-wpengine.netdna-ssl.com/wp-content/uploads/2021/09/NAEd-EITPP-Paper-Ronfeldt.pdf

Ronfeldt, M., & Campbell, S. L. (2016). Evaluating teacher preparation using graduates' observational ratings. Educational Evaluation and Policy Analysis, 38(4), 603–625. https://doi.org/10.3102/0162373716649690

Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. American Educational Research Journal, 50(1),4–36. https://doi.org/10.3102/0002831212463813

Saldana, J. (2016). The coding manual for qualitative researchers. London: Sage.

Samuels-Watkins, A. (2019). Black certified educators' lived experiences seeking employment in Connecticut's public education system. [Unpublished doctoral dissertation]. University of New England.

Sanders, W.L., & Rivers, J.C. (1996). Cumulative and residual effects of teachers on future student academic achievement. University of Tennessee Value-Added Research & Assessment Center.

Schaeffer, K. (2021, December 10). America's public school teachers are far less racially and ethnically diverse than their students. Pew Research. https://www.pewresearch.org/fact-tank/2021/12/10/americas-public-school-teachers-are-far-less-racially-and-ethnically-diverse-than-their-students/ Scott, L., & Alexander, Q. (2019). Strategies for recruiting and retaining Black male special education teachers. Remedial and Special Education, 40, 230–247. https://doi.org/10.1177/0741932517732636

Silva, Time (2014). Teaching residency programs: A multisite look at a new model to prepare teachers for high-need schools. National Center for Education Evaluation and Regional Assistance.

Simon, N. S., & Johnson, S. M. (2015). Teacher turnover in high-poverty schools: What we know and can do. Teachers College Record, 117(030308), 1-36.

Smith, T (2021, September 27). Racial wealth gaps in teaching won't close without bold economic policies. Prism Reports. https://prismreports.org/2021/09/27/racial-wealth-gaps-in-teaching-wont-close-without-bold-economic-policies/

TNTP: The New Teacher Project. (2018). The opportunity myth. https://tntp.org/assets/documents/TNTP_The-Opportunity-Myth_Web.pdf

U.S. Department of Education. (2022, April 30). Teacher shortage areas. https://tsa.ed.gov/#/reports

U.S. Department of Education. (2021a). 2021 Title II Report National Teacher Preparation Data. https://title2.ed.gov/Public/Home.aspx

U.S. Department of Education. (2021b). Education in a pandemic: The disparate impacts of COVID-19 on America's students. Office for Civil Rights. https://www2.ed.gov/about/offices/list/ocr/docs/20210608-impacts-of-covid19.pdf

Wallace, D., & Gagen, M. (2019). African American males' decisions to teach: Barriers, motivations, and supports necessary for completing a teacher preparation program. Education and Urban Society, 52(3),415–432. https://doi.org/10.1177/0013124519846294

Zeichner, K. M. (1993). Traditions of practice in U.S. preservice teacher education programs. Teaching and Teacher Education, 9(1), 1–13.

Appendix 1: Technical analyses

1. Logit and probit for meeting goal on strategies

Table A1. Logit and Probit Results of Enrollment Goals on Strategies

	1	2
Variables	Met goal - Logit	Met goal - Probit
Emergency funds	15.40	4.72
	(3,122.74)	(524.59)
Training costs for Black residents	1.39	0.86
	(1.41)	(0.86)
Test prep for Black residents	1.39	0.86
	(1.41)	(0.86)
Pre-residency summer	16.79	5.58
	(3,122.74)	(524.59)
Recruiters	-0.00	0.00
	(1.73)	(1.06)
Constant	-17.48	-6.01
	(3,122.74)	(524.59)
Observations	22	22

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

2. Full results of enrollment goal on budgets

Table A2. Budgetary allocations and recruitment outcomes

	1	2	3	4
Variables	Black residents	Black proportion of residents	Black residents	Black proportion of residents
% of total grant and match funds spent on scholarships	8.96	0.14	114.18	-1.14
	(33.65)	(0.67)	(0.00)	(0.00)
% of total grant and match funds spent on stipends	12.49	0.31	100.75	-0.76
	(29.38)	(0.58)	(0.00)	(0.00)
% of total grant and match funds spent on healthcare	-82.50	1.17	37.45	-0.63
	(81.32)	(1.62)	(0.00)	(0.00)
% of total grant and match funds spent on childcare support	-153.10	5.23		
	(159.68)	(3.18)		
% of total grant spent on testing/ licensure support	51.05	-0.39	175.79	-1.67
	(67.57)	(1.34)	(0.00)	(0.00)
% of total grant and match funds spent on books/supplies	-213.84	0.96		
	(315.20)	(6.27)		
% of total grant and match funds spent on technology support	-364.05	1.51		
	(483.38)	(9.62)		
% of total grant spent on transportation support	387.71	-2.73	344.76	-5.65
	(375.79)	(7.48)	(0.00)	(0.00)
% of total grant spent on emergency funds	72.14	-0.31	97.30	0.29
	(43.96)	(0.87)	(0.00)	(0.00)
% of total grant spent on loans/ISAs	-7.42	-0.15	-17.87	2.09
	(36.08)	(0.72)	(0.00)	(0.00)

Table A2. Budgetary allocations and recruitment outcomes (continued)

	1	2	3	4
Variables	Black residents	Black proportion of residents	Black residents	Black proportion of residents
% of total grant spent on recruitment staffing	29.62	-0.57	60.77	-0.29
	(40.36)	(0.80)	(0.00)	(0.00)
% of total grant spent on recruitment materials/services	51.33	1.18	332.93	-3.82
	(94.82)	(1.89)	(0.00)	(0.00)
% of total grant spent on mentor stipends	184.74	1.20	316.65	-2.76
	(128.20)	(2.55)	(0.00)	(0.00)
% of total grant spent on residency programming	311.24	-2.89	436.86	-4.03
	(217.69)	(4.33)	(0.00)	(0.00)
% of total grant spent on affinity groups	-594.77	4.49	-233.63	-1.00
	(420.60)	(8.37)	(0.00)	(0.00)
% of total grant spent on partnerships	-53.54	2.20	178.08	-3.47
	(121.38)	(2.42)	(0.00)	(0.00)
% of total grant spent on induction and post-residency support	-78.75	1.91		
	(101.27)	(2.02)		
% of total grant spent on program administration	48.53	1.29	392.93	-5.40
	(62.83)	(1.25)	(0.00)	(0.00)
Constant	0.25	0.04	-131.50	2.00
	(30.90)	(0.61)	(0.00)	(0.00)
Observations	21	21	15	15
R-squared	0.95	0.91	1.00	1.00

61

Table A3. Enrollment Goals and Budgetary Allocations

	1	2
Variables	Met goal	Met goal
% of total grant and match funds spent on scholarships	-2.34	1.61
	(1.79)	(0.00)
% of total grant and match funds spent on stipends	-0.43	1.68
	(1.57)	(0.00)
% of total grant and match funds spent on healthcare	-1.02	4.78
	(4.33)	(0.00)
% of total grant and match funds spent on childcare support	2.06	
	(8.50)	
% of total grant spent on testing/licensure support	-6.48	2.36
	(3.60)	(0.00)
% of total grant and match funds spent on books/supplies	27.56	
	(16.79)	
% of total grant and match funds spent on technology support	-22.06	
	(25.75)	
% of total grant spent on transportation support	-17.69	-1.26
	(20.02)	(0.00)
% of total grant spent on emergency funds	-2.13	0.72
	(2.34)	(0.00)
% of total grant spent on loans/ISAs	-1.09	-2.21
	(1.92)	(0.00)
% of total grant spent on recruitment staffing	1.94	2.84
	(2.15)	(0.00)

-

Table A3. Enrollment Goals and Budgetary Allocations (continued)

	1	2
Variables	Met goal	Met goal
% of total grant spent on recruitment materials/services	-4.52	3.27
	(5.05)	(0.00)
% of total grant spent on mentor stipends	-12.76	5.07
	(6.83)	(0.00)
% of total grant spent on residency programming	-15.88	7.45
	(11.59)	(0.00)
% of total grant spent on affinity groups	39.30	11.67
	(22.40)	(0.00)
% of total grant spent on partnerships	9.98	8.24
	(6.46)	(0.00)
% of total grant spent on induction and post-residency support	6.51	
	(5.39)	
% of total grant spent on program administration	-1.47	7.92
	(3.35)	(0.00)
Constant	1.61	-2.43
	(1.65)	(0.00)
Observations	21	15
R-squared	0.92	1.00

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

3. Number and proportion of Black residents, by BEI, with time trends

Table A4. Time trends in enrollment of Black residents, by Original BEI or not

	1	2
Variables	Black residents	Black proportion of residents
Original BEI in 2020	2.77	0.02
	(10.30)	(0.11)
2021	-7.93	-0.07
	(7.21)	(0.08)
2022	2.94	0.04
	(7.05)	(0.07)
Original BEI in 2021	19.73	0.12
	(14.72)	(0.16)
Original BEI in 2022	3.72	0.01
	(14.64)	(0.15)
Constant	12.86**	0.32***
	(5.41)	(0.06)
Observations	100	100
R-squared	0.07	0.04

Standard errors in parentheses *** p < .01, ** p < .05, * p < .10

Appendix 2: Interview guides

Interview Guide for Residents & Graduates

Background

- Tell me about your teaching placement? Prompts:
 - What grades and subjects do you teach?
 - What is the name of your school?
 - What motivated you to become a teacher? Probe: Did you have experience teaching before becoming a resident?
- What do you teach (subject/grade)? Why did you choose this as an area of specialization?

Part I: Recruitment into the BEI program

- Now I'd like to talk more about your recruitment into this particular residency program the Black Educators Initiative. How did
 you learn about this program? (a)
- What specific program characteristics did you consider when applying to this program? Prompts: scholarships, stipends, emergency funds, testing support, support for Title I schools, residency model, location, convenience?
- Did you consider applying to any other teacher educator programs? Why or why not?
- In what ways, if any, did you receive financial support to participate in this program? Prompts: Scholarships, emergency funding, licensing exam fees, professional development funding, housing etc.
- In what ways was this financial support important for you in your decision to become a resident? Could you give us some examples?

Part II: Program preparation

- Please tell me a little bit about the curriculum of this teacher residency program. What are some broad areas that you cover? What does a typical week look like?
- Does the program curriculum include specific topics related to learning about the school, its students or about the school district? Could you give us some examples?
- In what ways, if any, did the program prepare you for teaching students of color in high-need schools?
- Are there 1-2 programmatic aspects of this residency program that stood out for you? Why did you pick these?

Part III: Program mentoring and community support

- I'd like to understand your experience of the mentoring aspect of this program. Please tell me a little about your mentor. Prompts: their race, their teaching experience, their subject area expertise, your relationship with them.
- In what ways did your mentor support you? In what ways could they have provided better support?
- In what ways, if any, did you feel supported by other teachers, residents or school community members?
- What are some ways in which you felt supported as a Black educator?
- What are some areas in which you would have liked more support?

Part IV: Impact of the program

- What are your plans after this program? Do you plan to continue to teach? [Prompts: Do you have a commitment to teach in the district after completing the program?]
- Did you receive any support in finding a teaching placement?
- What impact has the program had on your development as a teacher?
- In what ways, if any, do you feel under-developed?
- Imagine I am starting my own Teacher Residency Program for Black educators. What advice would you give me about how to design and deliver my program to meet the needs of Black educators?

Interview Guide for Administrators

Background and program design (ToA)

- · How long have you been in your current role?
- Could you give us some of the background to the development of the BEI program? How did it come about?
- What were some of the key considerations that went into designing the BEI program? (ask for a copy of relevant document, if any, if we don't already have it)

Part I: Recruitment into the BEI program

- If you were to pick one or two strategies that have been really effective in recruiting Black residents into the program, what would they be and why?
- If you were to pick one or two strategies that have been the least effective in recruiting Black residents into the program, what would they be and why?

Part II: Program preparation

- In your experience, in what ways, if any, does the BEI residency program prepare residents to teach in their particular school and in this particular school district? Could you give us some examples?
- Are there 1-2 programmatic aspects of the BEI, that stand out for you? Why did you pick these?
- Are these different from your other residency programs?

Part III: Support during the BEI program

- If you were to pick one or two aspects of the program that were the most crucial in supporting the teacher residents in the BEI program, what would these be? Why?
- Are these different from the support provided by other residency programs?
- In your experience, what are some of the challenges the BEI residency programs face?
- In your experience, what are some of the challenges Black teacher residents in the programs face?

Part IV: Impact of the program

- Are there any examples or stories where you have seen the impact of the program?
- If you were to redesign the program, what might that look like?
- Imagine I am starting my own Teacher Residency Program for Black educators. What advice would you give me about how to design and deliver my program?
- Is there a question I should have asked that I didn't ask?







Center for Public Research and Leadership

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK