

PERCEPTIONS OF STUDENTS OF COLOR ENROLLED IN A  
PRE-SERVICE TEACHER EDUCATION PROGRAM

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**Abstract**

This study was used to explore the college experiences of students of color in an education program at a public university in the Northeast. More than ever, there is a need for teachers of color due to the continuous increase of students of color in the country. This study followed an exploratory qualitative case study research design. Data were collected during the Spring 2023 semester. The sample included 20 full-time undergraduate education students who self-identified as Asian American, Black/African American, or Hispanic/Latino at a teacher education university in the Northeast. The instruments included a student demographics questionnaire and an open-ended interview. A thematic analysis approach was used to analyze the data. Five themes emerged from the data: Characteristics of Educators of Color, Education Career Motivators, Education Program Pros, Career Deterrent for an Education Major, and Ideas to Recruit and Retain Pre-service Teachers of Color. The results of this study provided suggestions to recruit, support, and retain students of color in teacher education.

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*School of Professional Studies  
Department of Education and Educational Psychology  
Doctor of Education in Instructional Leadership*

Doctor of Education Dissertation

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PRE-SERVICE TEACHER EDUCATION PROGRAM

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## **DEDICATION**

For my daughter Christina and my future children, to always remember that as children of Ecuadorian parents growing up in America, you have two amazing worlds to learn from.



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## **CHAPTER ONE: INTRODUCTION AND IDENTIFICATION OF THE TOPIC**

### **Misalignment Between Student and Teacher Demographics**

Throughout the US, students of color have steadily been increasing in numbers in K-12 public schools (NCES, 2023). Over the last five years, the population of PK-12 students of color attending public schools in the northeastern state where this study took place has increased from 47.6% in the 2018-19 academic year to 52.5% 2022-23 academic year, a 10.3% increase (Edsight, 2023), while the percent of students who were White changed from 52.3% in 2018-2019 to 47.5% in 2022-2023 (Edsight, 2023), a 9.4% decrease. For the 2022-2023 academic year, the state served 513,513 PK-12 students attending public schools, 5.2% of whom identified as Asian American, 12.6% as Black/African American, 30.0% as Hispanic/Latino, and 47.5% identified as White (Edsight, 2023).

Despite 47.8% of PK-12 students representing Asian American, Black/African American, or Hispanic/Latino for the 2022-2023 school year, only 10.8% of teachers identified as Asian American (1.3%), Black/African American (4.6%), or Hispanic/Latino (4.9%) (Edsight, 2023). Table 1 highlights the disproportion between teachers and students of color.

**Table 1**

***Percent of Teachers and Students in PK-12 Education for the School Year 2022-2023 in the State Where the Study Took Place***

Racial/ Ethnic Status	Percentage of Teachers	Percentage of Students
Asian American	1.3	5.2
Black/African American	4.6	12.6
Hispanic/Latino	4.9	30.0
White	88.7	47.5

*Note.* Adapted from the Edsight 2022-2023 reports on Percentage of Student Enrollment by Race/ Ethnicity and Educators Percentage by Race/Ethnicity.

There is clearly a racial gap between the number of teachers of color and students of color. Furthermore, White teachers are still predominantly the majority of teachers at 88.7%, regardless of White students no longer being the majority of the population at 47.5% (Edsight, 2023). The percentage of teachers who identified as White is close to double (1.9 times) the percentage of students who identified as White. On the other hand, the percentage of students of color is more than four times (4.4 times) the percentage of teachers of color.

**Students of Color Attending College and Choosing a Career in Education**

One reason for the misalignment between the number of K-12 students and teachers of color could be the shortage of undergraduate students of color obtaining a college degree and pursuing a career in education. The National Center for Education Statistics (2020) reported graduation rates for the cohort year 2014 for program completions at Title IV institutions. Within 4 years, 74.7% of Asian American, 40.6% of Black/African American, and 53.1% of Hispanic/Latino students graduate with a bachelor’s degree or the equivalent (U.S. Department of Education, 2020). These percentages of students who identify as Black/African American or



Hispanic/Latino are low when compared to 64.5% of White students who complete college within 4 years (U.S. Department of Education, 2020).

Furthermore, the number of college degrees awarded in the field of education continues to decrease across the country. In the year 2011-2012, there were a total of 1,792,163 conferred bachelor's degrees nationally, and 105,656 (6%) were in the field of education (U.S. Department of Education, 2022). Fast forward to the year 2020-2021, there were 2,066,445 conferred bachelor's degrees nationally and only 89,398 (4.3%) were in the field of education (U.S. Department of Education, 2022). Additionally, there is a larger percentage of White students completing an education degree compared to students of color acquiring the same credential. For the year 2019-2020 of all the undergraduates who received a diploma as a certified teacher, 66.5% were White compared to 3.2% Asian, 7.3% Black or African American, and 14.0% Hispanic or Latino (U.S. Department of Education, 2023)

### **Current Situation for the Education Field**

The lack of teachers of color is particularly concerning when considering the nationwide shortage of teachers that has continued to increase over the last decade (Nguyen et al., 2022). In the last 3 years, a reason for this shortage can be the onset and lingering effects of the COVID-19 pandemic which also impacted teacher preparation programs by limiting the in-person field experiences that are essential for this major (Rosenberg et al., 2021). In March 2022, U.S. Education Secretary Miguel Cardona called on states, districts, and higher education institutions to address the teacher shortages by using the federal COVID-19 relief funds (U.S. Department of Education, 2022) to recruit and train teacher candidates. Despite the use of federal aid to recruit new teachers, it is not enough to keep up with the shortage, especially when educators across the country continue to leave the profession.

A survey conducted in February 2022 by the National Education Association reported that approximately 55% of educators are considering leaving or have already left the profession earlier than planned (Walker, 2022). Furthermore, 62% of Black and 59% of Hispanic/Latino teachers who are already underrepresented in this field were considering leaving the profession (Walker, 2022).

Some of the reasons for teachers to leave include being overworked which can lead to burnout; having limited resources to address students' needs in high-poverty, high-minority, and urban communities; feeling a lack of support and collaboration from school administration; and experiencing both implicit and explicit forms of racism (Benson et al., 2021; Hopkins, 2023; Ingersoll et al., 2019; Liu et al., 2017). Teachers of color have encountered all these situations and additionally reflected on experiencing various forms of discrimination and microaggressions during their educational programs and schools in which they have been placed (Benson et al., 2021; Ingersoll et al., 2019; Pham, 2018; Rodriguez-Mojica et al., 2020).

### **Rationale for Selecting the Topic**

Teachers play an important role in the lives of their students as well as in the social and economic development of our country (Ingersoll et al., 2021; Menter, 2016). Nonetheless, having a teacher of color has provided evidence for academic and social benefits for all students, and having a positive role model in the classroom is especially important for students of color (Alvarez & Paters, 2021; Boyd et al., 2022; Davis et al., 2023; Liu et al., 2017; Moss & Ehmke, 2020; Schwartz, 2012). When teachers of color serve as role models for students of color, the graduation rates for students of color improve (Alvarez & Paters, 2021; Davis et al., 2023; Schwartz, 2012). This is an important finding, as students of color tend to have low high school graduation rates, Blacks at 81% and Hispanics at 83% compared to their White counterparts at

90% (U.S. Department of Education, 2023). Additionally, teachers of color tend to have more positive perceptions of students of color and make fewer referrals for students of color to special education programs (Liu et al., 2017). Unfortunately, Black, and Hispanic students tend to be referred the most often and served under the Individuals with Disabilities Education Act (IDEA) (U.S. Department of Education, 2023). Overall, there are benefits of having teachers of color for all students, such as gaining multi-ethnic experiences and unlearning cultural stereotypes (Liu et al., 2017).

### **Statement of Problem**

The continuous growth of students of color in K-12 classrooms, the low percentages of college students of color graduating or pursuing a career in education, and the shortage of current teachers of color calls for the need to explore ways to increase the pool of pre-teachers of color in undergraduate education programs. Considering the current crises of teacher shortages in general, increasing undergraduate pre-service teachers of color is an even bigger concern.

Currently most of the literature reveals studies being conducted with teachers once they have obtained an education degree (Blazar, 2021; Cherng & Halpin, 2016; Griffin, 2018). Yet, more research needs to be conducted on how higher education institutions can help increase the number of students of color completing a degree in education.

### **Potential Benefits of Research**

In the context of teacher education programs, exploring the perceptions of students of color helped provide suggestions to recruit, support, and retain this population. Research suggests that when students of color have teachers from similar racial and ethnic demographic backgrounds, they are able to make more profound connections to their teachers, which benefits them personally and academically (Menter, 2016; Walker, 2022).

This study may help higher education administrators make informed decisions based on the recommendations and experiences of current students of color enrolled in a pre-service teacher education program. Some recommendations include participants' suggestions to begin recruitment early in the high school years, create programming specific to targeted audiences, market and promote the available college resources, and invest in stipends or other funds that can be used to pay for expenses beyond the college tuition. Additionally, the study brought to light the resources, programs, and policies that already support the students of color in a pre-service teacher education program.

### **Definition of Key Terms**

1. *A Pre-service Teacher Education Program* is designed to provide a post-secondary education for students who are interested in a teaching career (Liu et al., 2017).
2. *Critical Race Theory* is a framework to explore racial inequalities by examining curriculum, instruction, assessment, school funding, and desegregation in education (Delgado & Stefancic, 2017; Ladson-Billings, 1998).
3. *Culturally Relevant Pedagogy* is a way to provide opportunities for students to maintain their cultural integrity and be successful academically (Ladson-Billing, 1995, 2006).
4. *Field Placement or Field Experience* is a requirement for teacher preparation programs where pre-service teachers participate in observation hours, practicums, and student teaching to expose them to the classroom under the supervision of a certified teacher in the field (Rodriguez-Mojica et al., 2020).
5. *First-generation College Student* is a term that has been defined as students whose parents or guardians did not complete a college degree or students who are first in their family to pursue postsecondary education (Gibbons et al., 2019).

6. *Full-time Students* carry at least 75% of an undergraduate student load (U.S. Office of Education, 1968). A “normal student load is the number of credit hours required for graduation divided by the number of terms normally required for graduation” (U.S. Office of Education, 1968, p. 49). At Welby University, an undergraduate student needs to register for at least 12-15 credits in a given semester to be considered having a full credit load.
7. *Racialization* is the process of categorizing or dividing according to a particular race (Rodriguez-Mojica et al., 2020; Smith Kondo & Bracho, 2019). For example, making assumptions of an entire group based on their skin color or physical appearance.
8. *Students of Color* typically encompass those students who are Black/African American, Hispanic/Latino, Asian American, Pacific Islander, American Indian/Alaska Native, and of two or more races (U.S. Department of Education, 2023). This study will only include students who identify as Asian American, Black/African American, or Hispanic/Latino, as these are the three main diverse populations in the state where this study is taking place. In July 2022, the state’s population estimate of 3,626,205 included 5.1% of Asian Americans, 12.7% of Blacks/African Americans, and 17.7% of Hispanics/Latinos (U.S. Census Bureau, 2022). For the purposes of this study the terms Asian American, Black/African American and Hispanic/Latino will be used to represent the participants of this study until they self-identify, after completing the demographic survey.
9. *Retention* refers to the rate at which students continue in college and typically encompasses a 4- to 6-year period for undergraduates (Trent et al., 2021).
10. *Undocumented* describes “a foreign national who entered the United States without inspection or with fraudulent documents or who entered the United States legally as a

nonimmigrant but violated the terms of the visa status and remained in the United States without authorization” (Kim, 2013, p. 55).

## **Methodology Overview**

### **Description of the Research Design**

The study used an exploratory qualitative collective case study approach (Merriam, 1998). Qualitative research includes several forms of inquiry without disrupting a natural setting to help understand and explain a social phenomenon (Merriam, 1998). It is a type of study where the researcher is interested in learning about the lived experiences of individuals and exploring social variables (Holliday, 2016; Merriam, 1998).

### **Research Questions**

This study was supported by the following research questions:

1. What factors influenced the decisions of individuals of color to pursue a career in teaching?
2. What are the perceptions of undergraduate students of color for staying in a pre-service teacher education program?
3. What recommendations do undergraduate students of color give to help recruit, support, and retain students of color in a pre-service teacher education program and for the teaching profession in general?

### **Setting, Participants, and Sampling Procedure**

The study was conducted in Welby University (pseudonym), located in the Northeastern United States (U.S.). This small university offers undergraduate and graduate programs, including three doctoral degrees. This qualitative study was conducted utilizing purposive sampling following Patton’s criterion guidelines (Merriam, 1998; Patton, 1990). For the Spring 2023, there were 111 students enrolled in the education program. Out of these students, 3

identified as Asian American, 20 identified as Black/African American, and 4 identified as Hispanic/Latino (J. Wilcox, personal communication, June 26, 2023). A caution is given about the accuracy of these data since students do have the option to skip questions regarding their race/ethnicity in the college application. Prospective participants needed to be enrolled full-time in this university's teacher education program and self-identify as either Asian American, Black/African American or Hispanic/Latino. All 27 education candidates who met these criteria were invited to engage in this study. In total, 22 undergraduate pre-service teachers of color consented to participate in the study during the Spring 2023 semester. Subsequently, 20 participants completed all aspects of the study.

### **Instrumentation and Data Collection**

This study utilized two instruments for data collection and all data were collected during the Spring 2023 semester. The Student Demographic Questionnaire (SDQ) was created by the researcher to gather basic demographic information about the participants and information to coordinate the interview portion of the study. Interviews were scheduled after the completion of the SDQ, allowing participants to share information about their educational experiences, major influences regarding their career decision-making, and recommendations to increase the number of students of color in their education program.

### **Description and Justification of the Analyses**

Data from the Student Demographic Questionnaire (SDQ) were used to provide a rich description of the participant demographics. Interview responses were recorded and reviewed for accuracy. NVIVO software was utilized to organize data coding. Thematic analysis was based on the six-step guidelines from Braun and Clarke (2006). Braun and Clarke (2006) describe thematic analysis as a method used for "identifying, analyzing, and reporting patterns (themes)

within data” (p. 6). Braun and Clarke (2006) advised that analysis is not a linear process rather a recursive process that moves back and forth as needed.

### **Brief Review of Study Findings**

Analysis of the data yielded five themes to answer the study’s research questions.

#### **Theme One: Characteristics of Educators of Color**

This theme acknowledges participants’ personal origins that go beyond their ethnic/racial identity. Participants shared information about their families and themselves. Some of the personal descriptions included being immigrants to the United States and/or having parents who were immigrants to the United States. The parents of all interviewees were immigrants to this country. Participants shared information regarding their legal status as well as whether they were an ESL student. Participants also disclosed being first-generation college students. Additionally, some participants discussed having academic difficulties such as a language barrier and/or a low GPA, resulting in enrollment for an extra year in school. Personal difficulties were also disclosed, such as dealing with ADHD, anxiety, self-doubt, and/or a lack of confidence. Lastly, participants shared the ways that they responded to different challenges by being resilient. Their strategies included the implementation of a variety of coping mechanisms, including the cultivation of a positive mindset. Teacher candidates shared stories including their experiences facing racism and dealing with confusing college and teacher certification procedures.

#### **Theme Two: Education Career Motivators**

The decision-making process used to become an educator was influenced by three factors: internal motivators, external motivators, and experiences working with students. When describing internal motivators, participants talked about their passions for a specific subject



such as music or history. Additionally, participants disclosed their desire to make an impact in this world and to be role models for future generations. Regarding external motivators, participants shared having family members who were educators, being influenced by previous teachers, and being attracted to the current availability of teaching positions. Lastly, all the students disclosed experiences either in high school and/or college where they had the opportunity to work with students.

### **Theme Three: Education Program Pros**

Participants highlighted the positive exposures that they were currently having in the education program. Some of these experiences included having interactions with faculty and their cohort members, which created a positive education program culture. Furthermore, participants talked about how they were satisfied with the program due to observing many best practices for use in the classroom and having access to professional opportunities within the community. Lastly, participants described the positive experiences that they were having during their field experiences. They enjoyed taking part in these field experiences as early as freshman year.

### **Theme Four: Career Deterrents for an Education Major**

Even though participants maintained their commitment to the education program, some candidates revealed deterrents that caused doubts about continuing with this career path. Concerns were expressed about social/cultural issues in education such as the lack of teachers of color and the observation that there were few male teachers in specific grade levels and subject areas. There was also a lack of a diverse curriculum in the K-12 schools as there was a main focus on Historic Whiteness. Teaching as a career was not positively perceived by society as indicated by the negative opinions that were shared with future teachers, and it was not

highly valued by society when compared to other careers. Additionally, they were disconcerted about high school students who receive poor preparation to obtain college access and, once in college, sometimes experience a confusing pathway to becoming a certified teacher. Lastly, participants acknowledged that teachers of color do not have the best working environments. In the aftermath of COVID-19, there were concerns regarding funding, school safety, and low pay.

### **Theme Five: Ideas to Recruit and Retain Pre-Service Teachers of Color**

Participants stated ideas to increase recruitment and retention of pre-service teachers of color. Some of the ideas included paying attention to the audience where marketing and promotion of the education program should take place. Their recommendations included creating informational college workshops specific for parents, encouraging students to take an education class through their high school or college, and marketing the academic resources around campus to inform students about the support that will be available once they enroll in college. Lastly, to retain the students of color in the education program, participants mentioned programmatic strategies that the department should take into consideration. These strategies consisted of acknowledging the minority students on campus by hosting events specific for them, hiring more professors of color, requiring a diversity class for all students, and finding more ways to reduce the college financial burden.

### **Chapter Summary**

This study was undertaken to explore the college experiences of students of color enrolled in a pre-service education program with the goal of providing guidelines to recruit, retain, and support students of color. This first chapter includes a brief overview of the shortage of teachers of color across the country and provides a rationale for selecting the topic, statement of the problem, potential benefits of research, and key terms. The methodology overview

included a description of the research design, research questions, setting and participants, instrumentation, and data analysis. The summary of the study's findings focused on the five themes that emerged from the 20 in-depth interviews. The five themes were titled: Characteristics of educators of color, Education career motivators, Education program pros, Career Deterrents for an education major, and Ideas to recruit and retain pre-service teachers of color.

## **CHAPTER TWO: REVIEW OF THE LITERATURE**

To explore the college experiences of the three largest groups pertaining to students of color in a pre-service teacher education program, a range of literature was considered. The areas that are discussed in this review of the research include (a) the theoretical frameworks of critical race theory (CRT; e.g., Bell & Busey, 2021) and culturally relevant pedagogy (CRP; e.g., Ladson-Billings, 1995) used to support the purpose of this study; (b) historical trends in diversity concepts and their relevance to pre-service teacher education programs in the context of CRT and CRP; (c) the factors commonly involved in the choice of teaching as a career; (d) the benefits to the educational system when teachers of color are in the workforce; and (e) the recruitment, retention, and support of college students in teacher education programs.

### **Literature Review Process**

The main sources utilized to find references were EBSCO Combined Databases (e.g., ERIC, Education Research Complete, Teacher Reference Center, JSTOR, and APA PsycInfo) accessed through a university's library system, and Google Scholar. All searches were filtered to include only peer-reviewed articles published within the past 5–6 years. Regarding historical events and the definition of terms characterizing ethnic diversity in education, older references were also included to clarify or contextualize information concerning trends over time.

This research process began with a review of articles that used CRT and CRP in reference to recruiting, supporting, and retaining pre-service teachers of color. Specifically, Boolean terms such as “critical race theory,” “CRT,” “culturally relevant pedagogy,” “pre-service teachers,” “students of color,” “teaching,” “education,” “college/university,” “retention,” “recruitment,” “support,” and “career choice” were used. As articles were reviewed, synonyms of the aforementioned terms were added, including “K–12 education,” “undergraduate,” “teacher

candidates,” “culturally responsive teaching,” “secondary education,” “higher education,” “postsecondary education,” “financial initiatives,” and “college campus support.” While reviewing discovered articles, the researcher also realized that many of the publications were categorized by a specific area of race/ethnicity. Thus, “Asian Americans,” “Black/African Americans,” “Hispanic/Latinos,” were added. This initial process produced 165 articles.

The researcher reviewed the initial 165 articles which were reduced based on the following guidelines: (1) double-checking for assurance of peer-reviewed publications only, and (2) prioritizing references that highlighted undergraduate pre-service teachers as compared to practicing teachers or graduate pre-service teachers. The initial 165 articles were reduced to 105 items based on following the first guideline. After applying the second guideline a total of 60 references were identified. While many of the references included teachers who reflected on their college experiences, pre-service teachers in undergraduate programs were not the main focus of these publications. Furthermore, when only examining studies that included pre-service teachers of color who identified as Asian Americans, Black/African Americans, or Hispanic/Latinos, the researcher identified a total of 23 articles. Finally, a review of the reference lists in each study was also performed to see if any more articles could be added to the set. Using this process, 7 more references were added, making a total count of 30 articles. A level of saturation was met. Table 2 provides a brief description of the selected studies for this literature review.

Although it was not the intention during this process to limit resources to specific research methodology or geographic area, most of the publications included a qualitative methodology approach and were conducted in the United States. During this process, the researcher realized that there was a lack of literature specific to pre-service teachers of color in undergraduate programs. This discovery reinforced the need for this study. This literature review

aims to increase understanding about current and past research trends related to students of color enrolled in pre-service teacher education programs.

**Table 2***A Brief Description of the Literature Used to Support the Purpose of this Study*

Citation	Participants	Sample	Design	Results
Adams and McBrayer, 2020	9 Participants Male ( $n = 4$ ), Females ( $n = 5$ ) African American ( $n = 7$ ), Asian ( $n = 1$ ), and Hispanic ( $n = 1$ )	First-generation College Students	Qualitative	Finances play a role when choosing a college, yet the expense of a college degree leads to a better lifestyle after graduation.
Bell and Busey, 2021	4 Participants Females ( $n = 4$ ) Black ( $n = 1$ ), and Latina ( $n = 3$ )	Pre-service Teachers & First-generation College Students	Qualitative	The intersection of race, class, gender, and language oppression played an important role in the cohort model, curriculum, and program structure.
Benson, 2020	1 Participants Females ( $n = 1$ ) African American ( $n = 1$ )	African American Teacher	Qualitative	Developing a critical consciousness, practicing culturally responsive teaching, and utilizing an anti-colonial framework can help increase a pre-service teacher's agency.
Blazar, 2021	321 Participants Male ( $n = 51$ ), Females ( $n = 270$ ) Black ( $n = 78$ ), Asian ( $n = 13$ ), Hispanic ( $n = 10$ ), and White ( $n = 220$ )	Teachers from 4 different districts	Mixed Methods	Classrooms with a teacher of color had an increase in students' outcomes, including higher test scores and improved school attendance.
Boyd, et al., 2022	9 Participants Male ( $n = 6$ ), Females ( $n = 3$ ) Black ( $n = 7$ ), and Latinx ( $n = 2$ )	Pre-service teachers	Qualitative	Centering, validating, and valuing students' diverse cultural and ethnic identities by practicing Culturally Relevant and Sustaining Pedagogies (CRSP) can empower and support pre-service teachers of color.

Citation	Participants	Sample	Design	Results
Burns Thomas, 2020	19 Participants African American / Black ( $n = 5$ ), Hispanic/Latino ( $n = 4$ ), Asian ( $n = 4$ ), Biracial ( $n = 4$ ), and White ( $n = 2$ )	Teachers, Administrators, and Board of Education Members	Qualitative	There is a need for a more holistic approach to the policies regarding hiring and accreditation.
Carothers et al., 2019	39 Participants Male ( $n = 3$ ), Females ( $n = 36$ ) over 50% identified as racial/ethnic minorities	High school students interested in teaching	Quantitative	Summer education/teaching camps such as the EDUcamps can help increase a university's enrollment into education programs.
Carrico, 2019	24 Participants Male ( $n = 8$ ), Females ( $n = 16$ )	High school juniors and seniors	Qualitative	Local culture and context can expand alternative career pathways such as those suggested in Social Cognitive Career Theory (SCCT).
Carter and Bradford, 2019	87 Participants Male ( $n = 10$ ), Females ( $n = 67$ ) Preferred not to specify ( $n = 10$ ) Black / African American ( $n = 1$ ), Hispanic / Latino ( $n = 3$ ), Multiracial ( $n = 3$ ), White ( $n = 72$ ), other ( $n = 3$ ), and prefer not to specify ( $n = 5$ )	Teachers from 2 different school districts	Mixed Methods	Practicing Culturally Relevant Pedagogy led to positive outcome expectancy and self-efficacy for elementary school teachers.
Cherng and Halpin, 2016	2,756 teachers in 317 schools from 6 school districts 157,081 students Measures of Effective Teaching (MET) database	Students and Teachers from Grades 4 – 9	Mixed Methods	Teachers of color had higher expectations from their students and helped them navigate systems and obstacles in society.
Esparza et al., 2019	11 Participants Females ( $n = 11$ ) Latina ( $n = 11$ )	Pre-service Teachers	Mixed Methods	Preparation resources for teacher certification and resilience can support the success of Pre-service teachers in a Bilingual Education Program.



Citation	Participants	Sample	Design	Results
Fajardo Castañeda, 2014	6 Participants Males ( $n = 3$ ), Females ( $n = 3$ ) Colombian ( $n = 6$ )	Pre-service Teachers	Qualitative	A teaching community and the relationship between beliefs and classroom practice help construct teachers' professional identities.
Garza-Rodríguez, 2022	40 Participants Male ( $n = 9$ ), Females ( $n = 30$ ), and non-binary ( $n = 1$ ) Black ( $n = 2$ ), Latina ( $n = 6$ ), and Laotian ( $n = 1$ )	Pre-service Teachers from a public and private institution	Qualitative	Personal, professional, social motivations, and life experiences affected the decision of becoming an English Language teacher.
Gist, 2017	9 Participants Male ( $n = 2$ ), Females ( $n = 7$ ) Black ( $n = 2$ ), Latina ( $n = 6$ ), and Laotian ( $n = 1$ )	Pre-service Teachers	Qualitative	Ineffective diversity policies and invisible faculty practices can offset the culturally responsive program design efforts and cause personal and systematic issues in a teacher education program.
Ingersoll et al., 2019	Study used data from the National Center for Education Statistics' (NCES) nationally representative Schools and Staffing Survey (SASS) and its supplement, the Teacher Follow-Up Survey (TFS) (p. 6). This is the largest and most comprehensive data source available on the staffing, occupational, and organizational aspects of elementary and secondary schools	Minority and nonminority elementary and secondary teachers	Mixed Methods	The majority of teachers of color are employed in high-poverty, high minority, urban communities, often with ineffective school administrators. These are factors in the minority teacher turnover rate.
James et al., 2020	18 Participants	HBCU's Faculty & Staff	Quantitative	Word of mouth, Financial Aid Awards, Recruitment from local communities, and flexible options to licensure/degree completion are four

Citation	Participants	Sample	Design	Results
				top recruitment strategies used by some HBCUs.
Milner, 2011	354 students, 59.8% were African American 27 teachers, 45% were African American	Staff and students at a middle school	Qualitative	Building and sustaining meaningful and authentic relationships with the students can help build cultural competence in urban and diverse classrooms.
Moss and Ehmke, 2020	112 Participants Male ( $n = 16$ ), Females ( $n = 96$ ) African American ( $n = 2$ ), Asian ( $n = 3$ ), Latino/a ( $n = 4$ ), and White ( $n = 103$ )	Pre-service teachers	Qualitative	Making a difference in the world and wanting to help children are reasons for choosing teaching as a career.
Nkrumah, 2023	3 Participants Male ( $n = 1$ ), Females ( $n = 2$ ) Black ( $n = 3$ )	Middle and high school teachers	Qualitative	There is a need for assessing engagement in science through a race/ethnicity lens to help develop African American learner's science identities.
Pham, 2018	2 Participants Females ( $n = 2$ ) Black ( $n = 1$ ), and Asian ( $n = 1$ )	Pre-service Teachers	Qualitative	Using a peer teaching model and positioning preservice teachers to become experts in the classroom can help them to teach in socially just and culturally relevant ways.
Philip et al., 2017	34 Participants Male ( $n = 22$ ), Females ( $n = 12$ ) African American ( $n = 1$ ), Asian ( $n = 14$ ), and Latinos ( $n = 19$ )	High school classroom	Qualitative	Teachers should be courageous to engage and address issues of race and racism.

Citation	Participants	Sample	Design	Results
Plachowski, 2019	8 Participants Females ( $n = 8$ ) African American ( $n = 2$ ), Asian ( $n = 1$ ), Latina ( $n = 4$ ), and Biracial ( $n = 1$ )	Pre-service Teachers	Qualitative	K-12 teacher classroom experiences can influence the drive to become teachers.
Rodriguez-Mojica et al., 2020	12 Participants Male ( $n = 3$ ), Females ( $n = 9$ ) African American ( $n = 1$ ), Asian ( $n = 3$ ), and Latina/Latino ( $n = 8$ )	Pre-service Teachers	Qualitative	Racial, nativist, and religious microaggressions created racialized experiences during student teaching placements.
Scott, 2018	10 Participants Males ( $n = 2$ ), Females ( $n = 8$ ) Black ( $n = 10$ )	Pre-service Teachers	Qualitative	Establishing strong mentoring programs that include support from Black faculty and peers can increase the success of black students enrolled in special education preparation inclusion programs.
Simpson and Bista, 2023	60 Participants Male ( $n = 23$ ), Females ( $n = 34$ ) Non-conforming/Transgender ( $n = 3$ ) Black / African American ( $n = 49$ ), Asian ( $n = 6$ ), Hispanic ( $n = 3$ ), Native American ( $n = 1$ ), and Other ( $n = 1$ )	Pre-service Teachers at a community college	Quantitative	Culturally based clubs and organizations that provide connections to students' native backgrounds can help create a positive impact on students of color.
Smith Kondo, 2022	Professor and pre-service teachers taking Diversity 2000 and Diversity 3000	College professor and students	Qualitative	Using culturally relevant pedagogies during activities, readings, and overall curriculum delivery can help preservice teachers develop a critical consciousness.
Smith Kondo and Bracho, 2019	22 Participants Females ( $n = 22$ ) Black ( $n = 6$ ), Asian ( $n = 2$ ), Latina ( $n = 4$ ), White ( $n = 7$ ), and Multiracial or other ( $n = 2$ )	Pre-service Teachers	Qualitative	Personnel working in teacher education programs need to be aware of racializing teacher candidates as it can create negative experiences for the students.

Citation	Participants	Sample	Design	Results
Strachan, 2020	2 Participants Male ( $n = 2$ ) African American ( $n = 2$ )	Pre-service Teachers	Qualitative	Intrinsic and altruistic reasons such as the love for science and for teaching impacted the decision to become a science teacher.
Trent et al., 2021	10 Participants Males ( $n = 1$ ), Females ( $n = 9$ ) Black/ African American ( $n = 6$ ), Asian ( $n = 1$ ), and Hispanic Latino ( $n = 3$ )	Pre-service Teachers	Qualitative	Learning environments that are safe, inclusive, and welcoming are key to retaining students of color.

## Critical Race Theory

Critical race theory, or CRT is a framework that conveys that racism is embedded into the different systems of the American society going beyond individual prejudices (Busey et al., 2023; Delgado & Stefancic, 2017; Kaerwer & Pritchett, 2023; Klupchak, 2014). CRT has its roots in various movements of the early 1970s as activists and scholars studied the relationship between race, racism, and power (Busey et al., 2023; Delgado & Stefancic, 2017; Kaerwer & Pritchett, 2023). It primarily started in the legal field due to concerns regarding the representation of minority individuals in the legal system (Busey et al., 2023). Later on, CRT was expanded to be used in other fields such as sociology, history, and education (Busey et al., 2023; Kaerwer & Pritchett, 2023). Additionally, CRT demands consideration of strategies for change beyond understanding the social situations that give rise to racial inequalities and discrimination.

Pertaining to this study, there is a focus on how CRT is used in the education field to explain the racial inequalities that continue to exist regarding its laws, policies, funding, and pedagogical practices (Busey et al., 2023; Mayorga & Bradley, 2023). In the mid 1990's, Ladson-Billings and Tate (1995) introduced CRT to the education field to reveal racial inequalities through the examination of curriculum and instruction, student assessment, and school funding and desegregation within education systems (Ladson-Billings, 1998; Ladson-Billings & Tate, 1995). Ladson-Billings (1998) explains how CRT interrogates school curricula as possible sites of perpetuation for the "White supremacist master script" that mutes or even erases the voices of African Americans (p. 18). Regarding funding, CRT proponents argue that the lack of funding equity in schools is due to institutional and structural racism (Ladson-Billings, 1998).

Furthermore, there are five tenets of CRT that include (a) counter-storytelling, (b) the permanence of racism, (c) Whiteness as property, (d) interest conversion, and (e) the critique of liberalism (Bell, 1992; DeCuir & Dixson, 2004; Delgado & Stefancic, 2017; Ladson-Billings, 1998). The use of these five tenets show how race can be culturally used to oppress people of color (Delgado & Stefancic, 2017; Ladson-Billings and Tate, 1995). In the permanence of racism, there is a need for a realistic view as to how racial discrimination controls U.S. society within the political, social, and economic realms by, in many instances, privileging Whites over people of color (Bell, 1992, DeCuir & Dixson, 2004). In the tenet of Whiteness as property, individuals who are White have more exclusively than other populations the rights to possession, use, and enjoyment (DeCuir & Dixson, 2004; Ladson-Billings & Tate's, 1995). Specific to education, White students have access to rigorous curriculum and extensive use of school property, causing challenges for people of color (DeCuir & Dixson, 2004; Ladson-Billings & Tate's, 1995). In the fourth tenet, interest convergence acknowledges that White individuals can make decisions that seem beneficial for people of color but have the intent to ultimately benefit themselves (DeCuir & Dixson, 2004; Ladson-Billings & Tate, 1995). For example, schools recruiting more African American athletes to increase their school's competitive athletic teams, yet not supporting these athletes with access to higher level classes (DeCuir & Dixson, 2004). Finally, the critique of liberalism focuses on colorblindness which works against dismantling social inequities rather than aiding the cause, as people consciously or unconsciously ignore the inequalities due to race (DeCuir & Dixson, 2004).

Even though all the tenets play a role in this study, the tenet of counter-storytelling fits best as participants were encouraged to describe their journeys towards choosing education as a career. These stories presented an opportunity for participants to describe any marginalized

experiences they may have faced as individuals representing a racial minority. Counter-storytelling further challenges readers to confront any unconscious stereotypes or biases they may be harboring against people of color (DeCuir & Dixson, 2004; Delgado & Stefancic, 2017; Ladson-Billings & Tate, 1995). Despite many efforts to invoke change, there continue to be racial disparities in the U.S. education system, and many studies have used CRT to help examine how racism has played a role (Delgado & Stefancic, 2017; Klupchak, 2014).

CRT has been used as a theoretical framework in many studies regarding educators of color in education (Bell & Busey, 2021; Brown, 2014; Burns Thomas, 2020; Klupchak, 2014; Seriki et al., 2015). In 2014, Brown used CRT as a framework to analyze career paths of pre-service teachers of color and found race as a reason for their career choice when they saw a need to develop a social justice stance. Additional findings by Brown included a lack of support, preparation, and development for the inclusion of culturally responsive education in the curriculum at the undergraduate level, leaving students without a repertoire for evidence-based strategies to use in the K-12 environment designed to meet the needs of all students.

CRT has also been used to evaluate programs that intend to increase the racial diversity of the U.S. teaching population (Burns Thomas, 2020). In a qualitative case study that explored efforts to increase teacher diversity in Clifton, New York schools. Burns Thomas (2020) suggested that the school district needed to take a holistic approach when implementing hiring processes to increase the diverse population of teachers. There is also a call for not only encouraging students of color to become teachers, but to also break down the barriers that they can face, such as inadequate K-12 education, unaffordable post-secondary education, and racially biased certification exams (Burns Thomas, 2020). Bell and Busey (2021) used CRT for their intersectional narrative methodology to explore how four Black and Latina first-generation pre-

service teachers of color navigated the racial grammar of teacher education. They found that the intersection of race, class, gender, and language oppression played an important role in the cohort model, curriculum, and program structure. Specifically, there was a lack of faculty diversity, opportunities for diverse peer interaction, congruence in upbringing experiences, and space for sharing non-White stories and perspectives in the program (Bell & Busey, 2021). Seriki et al. (2015) used CRT as an analytical tool to investigate racism in teacher preparation programs by giving an opportunity for diverse educators to share their educational inequities. Findings included the need for teacher candidates to engage in critical self-reflection and self-awareness, as well as to have a willingness to act against racism (Seriki et al., 2015). These were only a few studies that demonstrate how CRT is used to bring to light educational inequities. In the next section, culturally relevant pedagogy is discussed regarding its importance in the educational landscape.

### **Culturally Relevant Pedagogy**

Culturally Relevant Pedagogy (CRP) is a framework developed by Gloria Ladson-Billings to provide opportunities for students to maintain their cultural integrity and be successful academically through student empowerment (Ladson-Billings, 1995, 2006). After thoroughly researching the practices of effective teachers of Black students, Ladson-Billings proposed the implementation of three pillars as part of CRP (Lavín, 2021). These three pillars include (a) academic achievement, (b) cultural competence, and (c) sociopolitical consciousness (Ladson-Billings, 1995, 2006). The first pillar, *academic achievement*, focuses on students' learning to develop scholastic self-esteem and confidence, instead of stressing assessment (Ladson-Billing, 2006, Lavín, 2021). Teachers focusing on academic achievement examine what and why students should learn regarding the curriculum and find different ways to implement it



in the classroom (Kibler & Chapman, 2019). In some cases, this will mean having the teacher help a student progress into different reading levels even if still failing the standardized test (Lavín, 2021). The second pillar of *cultural competence* “refers to when teachers can help students recognize and honor their personal cultural beliefs while understanding and accessing the wider dominant culture” (Ladson-Billing, 2006, p. 36). Within the cultural competence frame, teachers transition back and forth between students’ personal lives and teaching by getting to know their backgrounds, cultures, and experiences while at the same time ensuring a personal connection at school (Ladson-Billing, 2006; Milner, 2011). Teachers might assign classroom projects for students to learn about different cultures, eliminate stereotypes, and share highlights of each culture (Lavín, 2021; Milner, 2011). The last pillar, *sociopolitical consciousness*, has as its goal that students learn to use their developed skills to critique and understand their social position (Ladson-Billing, 2006). It is important for the students to be educated on the issues that directly or indirectly impact them to make societal changes and challenge the status quo (Ladson-Billing, 2006; Milner, 2011).

Over the years, CRP has been used as a theoretical framework in many studies regarding the need for a more diverse group of educators (Boyd et al., 2022; Brown & Cooper, 2011; Carter & Bradford, 2019; Milner, 2011; Nkrumah, 2023; Smith Kondo, 2022). Boyd et al. (2022) conducted a qualitative visual inquiry study to include contextualized stories and created visuals from 10 Black and Latinx students enrolled in a physical education teacher education (PETE) program at a predominantly White institution (PWI). This study shared the need to use CRP to bring attention to the students’ diverse cultural and ethnic identities (Boyd et al., 2022). Participants shared that while they were growing up, most of their teachers were White, even though they attended a neighborhood school with few White people (Boyd et al., 2022).

Unfortunately, the participants had teachers who lacked training on the three pillars of CRP and associated these students with displaying maladaptive behavior, were surprised if they succeeded academically, and, in many instances, failed to take the time to get to know them (Boyd et al., 2022). Even at the college level, a participant shared how a professor was not interested in getting to know his story (Boyd et al., 2022).

On the other hand, there are many benefits to schools that have teachers trained in the components of CRP. In a mixed methods study consisting of 83 participant surveys and 10 interviews, elementary school teachers share that after they were trained in CRP their students were more successful (Carter & Bradford, 2019). These teachers rated relationship building, the survey practice with the highest mean score as a way to build trust with their students (Carter & Bradford, 2019). By building trust, the teachers noticed their students felt safe and more inclined to advocate for themselves because they knew that their culture would be honored (Carter & Bradford, 2019). Additionally, in a two-year study at a bridge middle school, Mr. Hall, a fictitiously named White science teacher, shared how he was able to build cultural congruence within the diverse urban school (Milner, 2011). Mr. Hall knew the importance of recognizing, confronting, and addressing student identity as part of building cultural competence as a result of his training in CRP (Milner, 2011). He took the time to engage with his students by sharing his personal stories, leading them to see beyond his skin color (Milner, 2011). By sharing his background and its similarities with his students', such as growing up poor, he was able to build on his and his students' cultural knowledge (Milner, 2011).

In another qualitative study, three African American STEM teachers shared their experiences with CRP at a middle school and a high school (Nkrumah, 2023). One of the teachers shared the importance of mentoring as a way to show engagement with her students in

the sciences (Nkrumah, 2023). This teacher also shared that being disengaged with students in the classroom conversely causes them to express bad attitudes and apathy toward others in the school (Nkrumah, 2023). Another teacher in the study emphasized having a cultural competency vision for curriculum, activities, and lesson planning, especially in science subjects since the science field predominantly consists of White males (Nkrumah, 2023). Therefore, marginalized student groups can experience difficulties with teacher expectations that solely reflect dominant social norms instead of being culturally differentiated (Nkrumah, 2023).

Lastly, in an ethnographic study of teacher education programs (TEPs), Dr. Hernandez, an educator of color, used CRP in an effort to close the teacher quality gap (Smith Kondo, 2022). Namely, in her Diversity 2000 and Diversity 3000 courses at a racially and ethnically diverse university in the United States, she uses CRP to provide a bridge between course theory and lived experiences (Smith Kondo, 2022). Even when the majority of her students are from a different culture than hers, she makes sure to take into consideration their developmental needs while maintaining high standards of achievement (Smith Kondo, 2022). These studies are just a few examples of how CRP can benefit educators and students of color.

### **Students of Color in the United States**

A critical step toward challenging the existing stereotypes against students of color is learning more about representative populations. When describing students of color, researchers are generally referring to those who are Hispanic/Latino, Black/African American, Asian American, Pacific Islander, American Indian/Alaska Native, and of two or more races (U.S. Department of Education, 2023). Furthermore, Asian American, Black/African American, and Hispanic/Latino are the groups represented in this study and these terms will be used interchangeably with other self-identifying terms during interviews according to participants'

preferences. Understanding the historical trends of each of these terms as they have influenced or been adopted by each population is an important part of CRP.

The use of each of the terms Asian American, Black/African American, and Hispanic/Latino has gone through historical changes due to movements or events happening in the United States. *Asian American* is an umbrella term used to identify people who have ethnic backgrounds in South Asia, Southeast Asia, and East Asia (Chang, 2017). Asian Americans are one of the fastest growing populations in the country, with 7.3% (22 million people) of the population identifying as Asian American in the United States (Budiman & Ruiz, 2021). Within this group, Chinese Americans are the largest subgroup making up 24% of the Asian American population (Budiman & Ruiz, 2021). Asian Americans mainly reside in five states: California, New York, Texas, New Jersey, and Washington (Budiman & Ruiz, 2021).

Black and African American are terms that have been used interchangeably since the mid-1960s (Eligon, 2020). However, for some people in the community, the term *Black* can refer to the skin color and not the nationality of an individual (Adams, 2020; Eligon, 2020). On the other hand, the term *African American* signifies being someone born in the United States who has African ancestry (Adams, 2020; Eligon, 2020). Thus, many people in the United States use the more general term “people of color” to represent all non-European/White populations by (Adams, 2020; Eligon, 2020; Finigan-Carr, 2022). According to the U.S. Census Bureau (2022), individuals who identify as Black *or* African American, make up 13.6% of the population. The combination of these terms represents the second largest minority group, preceded by Hispanics/Latinos (U.S. Census Bureau, 2022).

Hispanic and Latino are terms that have also been used interchangeably since the 1980s (Lopez et al., 2023). More specifically, the term *Hispanic* has been used to describe people from

any of the Spanish-speaking countries while the term *Latino* includes Latin Americans regardless of the language that they speak (Lopez et al., 2023). In recent years, the term “Latinx” has gained some popularity as a gender inclusive term, yet there continues to be political debate over whether or not to make it an official term (Lopez et al., 2023). According to the 2022 U.S. Census report, the combined groups of Hispanic and Latino represent 19.1% of the population and are the fastest growing minority category. Additionally, Mexicans were ranked the largest Hispanic/Latino subgroup (U.S. Census Bureau, 2022). Throughout this literature review, studies presented will include any of these terms to identify Asian Americans, Black/African Americans, Hispanics/Latinos. Now that there is an understanding of the use of racial-ethnic terms, the next section will include some of the historical experiences and trends affecting these populations within the U.S. education system.

### **Historical Trends Affecting Students of Color**

By the year 2044, the combined racial minority groups, including African Americans, Hispanics, Asians, and multiracial people will be the majority of the population in America (Adams & McBrayer, 2020). Meanwhile, research using CRT continues to provide evidence that racism has impacted the political, social, and educational systems of our country which continue to affect the lived experiences of students of color. Highlighted in the following paragraphs are events or movements that have directly impacted Asian American, Black/African American, and Hispanic/Latino students.

#### ***Asian Americans***

Throughout the history of the United States, major events and policies that have impacted Asian Americans include (a) the Chinese Exclusion Act of 1882, (b) the involvement of Japanese Americans in World War II, and (c) the wars in Korea and Vietnam (Chang, 2017). More

recently, an event directly affecting the Asian American population was the COVID-19 pandemic, being incorrectly labeled by some individuals as an “Asian” or “Chinese virus,” and provoking hate crimes against members of the community as people blamed them for the cause and spread of the virus (Han, 2023). There were reports where Asian Americans were killed, beaten, and/or bullied, which caused some people in the Asian community to make changes to their daily life routines due to the fear of being victimized (Han, 2023; Liu, 2023; Zhao, 2023). In the educational setting, many Asian American students were and continue to be responsible for teaching their family members about racism since it is a topic not typically discussed by their parents, many of whom are foreign-born (Liu, 2023).

As schools started to reopen after the pandemic, Liu (2023) and Zhao (2023) investigated the perspectives of parents and students as they returned to school. In Liu’s (2023) study, more than half of the parents were concerned about their children experiencing discrimination. They urged the school to take action to stop the racial bullying against them and increase awareness of racism against members of the Asian community. They further recommended focusing on the scientific knowledge behind the Coronavirus rather than having excessive discussions about race (Liu, 2023). Conversely, Zhao (2023) found that Asian American college students were more socioemotionally adaptable to the COVID-19 anti-Asian racism because, unfortunately, they had prior discriminatory experiences where they had to do so (Zhao, 2023). The COVID-19 pandemic impacted everyone in different ways; yet it affected the Asian American community more than others, including students in pre-service teacher education programs.

### ***Black/African Americans***

The Black/African American community has experienced many events that have shaped the U.S. cultural and political landscape, such as (a) the Civil War, (b) *Brown v. Board of*

*Education* (1954), (c) the death of Martin Luther King Jr., and (d) the murder of George Floyd, among others. These events have especially impacted the Black community, which has been characterized as having high levels of violence, potentially causing increased risks for physical harm or problematic emotional and behavioral symptoms, especially among Black youth (Finigan-Carr, 2022). A recent movement that fights against racism and the historic violence against Black people, and towards freedom and equality is Black Lives Matter (BLM; Leach & Teixeira, 2022; Sheats, et al., 2018; Stark, 2022).

As a movement, BLM began in 2013 after the killing of teenager Trayvon Martin to protest racism and brutality displayed by police officers towards Black/African American people (Leach & Teixeira, 2022). This movement has caused many people to take part in protests, parades, and other activities to show the need for equality and support towards a democratic society that both understands the history of and lends support to the Black community (Leach & Teixeira, 2022). Key BLM leaders, Tamara Anderson, and Jesse Hagopian have coordinated the Black Lives Matter at School movement to bring awareness to policies affecting Black students and promote the hiring of Black educators (Stark, 2022). The BLM movement provides evidence of the need for CRT and CRP training in pre-service teacher education programs.

### ***Hispanic/Latinos***

An issue that has been and continues to be controversial for the Hispanic/Latino community is immigration policies concerning citizenship status. The language commonly used is whether or not an individual is undocumented. The term *undocumented* describes “a foreign national who entered the United States without inspection or with fraudulent documents or who entered the United States legally as a nonimmigrant but violated the terms of the visa status and remained in the United States without authorization” (Kim, 2013, p. 55). The Center for

Migration Studies in New York (CMS) estimated that around 21,036,500 immigrants of Hispanic origin live in the United States in 2019, of which 7,410,000 were undocumented individuals (Millet & Pavilon, 2022). Hispanic immigrants make up the largest undocumented immigrant population in the United States (Millet & Pavilon, 2022).

A program that was implemented to specifically help undocumented students is the Deferred Action for Childhood Arrivals (DACA) program (Hardina, 2014). In June of 2012, eligible youth had the opportunity to apply for DACA which protected them from deportation and allowed them to work legally in the United States for a period of two years, at which time their status would be subject to renewal (Casas et al., 2021; Hardina, 2014). DACA has allowed more than 830,00 individuals to gain access to a postsecondary education, employment, and health insurance, many of whom were Hispanic/Latino (Casas et al., 2021). However, even though DACA recipients have more privileges and benefits than people who are undocumented, many continue to experience marginalization and acts of racism due to their immigrant status.

DACA recipients continue to experience difficulties with financial assistance for education and fear of being deported (Casas et al., 2021; Hardina, 2014; Kim, 2013; Millet & Pavilon, 2022). The research of Cobb et al. (2016) found that Latino youth commonly experience discrimination based on their documentation status, English proficiency, and skin color. Additionally, Talleyrand, and Vojtech (2019) reported that 61% of undocumented Latinos cite discrimination as a problem that has hindered them from realizing their academic goals and objectives. Moreover, undocumented students can engage in a post-secondary education, but may not have the opportunity to graduate or obtain a job due to their legal status (Cobb et al., 2016; Millet & Pavilon, 2022). Although many undocumented Latino immigrants have lived in



this country for many years, they continue to experience racism and inequalities due to their legal status.

This section highlighted only a few of the historical events that have impacted students of color. Many of these experiences have influenced the identities of students of color as well as their goals and decisions. The next section will describe CRP related to achievement among students of color and their choice of a career, specifically in the field of education.

### **Teaching as a Career Choice**

Several theorists have used concepts such as an individual's lifespan development, personality traits, and other internal and external influences to explain why an individual chooses a specific career (Garner, 2022; Gladding, 2019; Walker et al., 2019). Krumboltz (2011) considers that there are four types of influences of career choice which include (a) genetics (i.e., race, sex, physical appearance); (b) environmental conditions and events; (c) past learning experiences, skills, and performance standards; and (d) values. Torres et al. (2014) explained additional factors that can affect the occupational choices made by marginalized groups in the United States (e.g., African Americans, Hispanics, Asian Americans, and Native Americans) include (a) socioeconomic status (SES), (b) degree of acculturation, (c) racial or ethnic identity, (d) appearance based on phenotype, (e) the individual's and their parents' educational attainment, (f) self-efficacy, and (g) the amount of experienced racial discrimination (Torres et al., 2014). Several studies have demonstrated why teachers of color decide to choose teaching as a career.

Personal experiences, such as influences of family members and past teachers also play significant roles in the selection of teaching as a career (Castañeda, 2014). In a qualitative descriptive study, Garza-Rodríguez (2022) specifically explored the personal, professional, and

social motivations of 40 Mexican teachers to become English Language Teachers. Participants for this study came from two different teacher preparation programs—one at a public university and the other at a private institution—in Nuevo León, Mexico (Garza-Rodríguez, 2022). The majority were female (75%), and all participants' ages ranged from 18–33 years (Garza-Rodríguez, 2022). One finding from the study was that 10 of the participants mentioned family members as influencing their decision in which they were reassured that they were good with kids or with teaching different languages. Moreover, one participant shared how she had family members who were also educators (Garza-Rodríguez, 2022). Additionally, 29 out of the 40 participants shared that previous native English-speaking and non-native English-speaking teachers positively impacted their decision to become English Language Teachers (Garza-Rodríguez, 2022).

Castañeda (2014) explored how six Colombian pre-service teachers constructed their professional identities. All participants were in their final stage of a five-year teacher education program, and 50% were females (Castañeda, 2014). One of the students shared how his family was an influence on his career choice, particularly given the financial costs of pursuing a college education as his family believed there would be fiscal benefits in teaching different languages (Castañeda, 2014). Similar to Garza-Rodríguez's (2022) study, all of the participants in the study highlighted the influence of former teachers in their decision to teach. Participants mentioned, for example, how former teachers were role models who provided them with goals to imitate or surpass (Castañeda, 2014). Apart from influences such as family and past teachers, altruistic reasons played a role in choosing to become an educator.

In general, being role models, and having a sense of needing to make a difference in the world, and caring for children are common altruistic reasons that people provide for choosing

teaching as a career. A qualitative study by Strachan (2020), at a small historically Black university, captured the perspectives of two African American pre-service teachers on their career path. Both of the participants were pursuing a graduate degree in secondary education with a concentration in biology and one of them was 30 years old while the other was 27 years old (Strachan, 2020). Both of the participants possessed a love for biology and initially wanted to go into the medical field, but later realized that they wanted to become teachers due to the lack of representation of African American men in K-12 classrooms (Strachan, 2020). Thus, they saw themselves as role models or a source of inspiration for diverse students to both excel in STEM and/or choose teaching as a career (Strachan, 2020).

Using survey research methods, Moss and Ehmke (2020) examined responses to open-ended questions from the FIT-Choice measure to find out the reasons students choose a career in teaching. The study took place at a large Midwestern R-1 university, where participants were recruited from three out of five introductory teacher preparation courses (Moss & Ehmke, 2020). There was a total of 112 students who participated in this study and 96 of them were women (Moss & Ehmke, 2020). Although the majority of the participants were White, two were African American, three were Asian, and seven were Latino/a (Moss & Ehmke, 2020). One of the study's findings indicated that 87 of the participants chose teaching because they wanted to help and/or work with children (Moss & Ehmke, 2020). Those participants shared how they were motivated to make a difference in the world through teaching (Moss & Ehmke, 2020). All the studies reviewed explained why these students of color chose teaching as a career. Nonetheless, literature on how students of color may be effectively recruited, supported, and retained in pre-service teacher education programs remains scarce. The next section will discuss the critical need for an increase in teachers of color in U.S. education.

## **Significance of Teachers of Color**

Diversifying the teaching force remains an ongoing issue as the gap between the number of students of color continues to increase as compared to the number of teachers of color (NCES, 2023). Efforts to increase the number of students of color pursuing a career in teaching is key since there are many benefits that their representation, unique skills, and experiences can provide to the learning environment, especially for students of color (e.g., Archer et al., 2022; Blazar, 2021; Cherng & Halpin, 2016; Griffin, 2018; Liu et al., 2017; Pham, 2018; Philip et al., 2017; Plachowski, 2019; Redding, 2019). One benefit of teacher diversity in schools is that teachers of color are more likely to practice CRP (Blazar, 2021).

Blazar (2021) analyzed The National Center for Teacher Effectiveness dataset of fourth and fifth grade classrooms that were randomly assigned to a teacher of color in four school districts. He found that having a teacher of color increased the engagement and outcomes for students of color, resulting in higher test scores, and more frequent school attendance (Blazar, 2021). There were also noticeable components of CRP in the curricula of these teachers since they tended to (a) view students' intelligence as malleable rather than fixed, (b) implement differentiated instruction to fit students' needs, and (c) serve as role models (Blazar, 2021). These study results echo Ladson-Billings' (2006) earlier arguments on the effectiveness of CRP.

Teachers of color are commonly more comfortable with initiating instructional and institutional changes such as negotiating teaching practices that promote equal educational opportunities in alignment with following Ladson-Billings' (2006) three pillars of cultural competence (Archer et al., 2022; Pham, 2018). Due to their shared cultural understanding with students of color, teachers of color often have greater awareness of multicultural referents and can help all students unlearn racist stereotypes (Liu et al., 2017; Redding, 2019). In their

classrooms, teachers of color such as Ms. Martín in the study by Philip et al. (2017), who self-identified as Latina, used humor and sarcasm to dismantle stereotypes when teaching her Latino and Latina students.

Other studies have also shown the importance of teachers of color, specifically from Latino and Black backgrounds. For instance, using the Schools and Staffing Survey of 2012, Griffin (2018) hosted focus groups with Black and Latinx teachers around the country to better understand their professional experiences. Some of the findings from these focus groups included that, while Latinx and Black teachers are able to relate to all students, the students of color were perceived as being more engaged and motivated for seeing their racially congruent teachers as role models willing to create connections with them beyond the classroom (Griffin, 2018; Griffin & Tackie, 2017; Plachowski, 2019). Additionally, the participants expressed holding high expectations for their students of color and helping them navigate systems and obstacles in society in order to be successful (Griffin, 2018; Griffin & Tackie, 2017).

Finally, Cherng and Halpin (2016) used the Measures of Effective Teaching (MET) longitudinal database which included 157,081 K–12 students to analyze their perceptions towards having minority versus White teachers. The researchers used hypothesis testing and included seven domains referred to as the 7Cs: challenge, classroom management, care, confer, captivate, clarify, and consolidate (Cherng & Halpin, 2016). Some of the findings included students reporting that Latino and Black teachers provided clearer instructional goals, held higher academic standards, and better supported their efforts compared to their White teachers (Cherng & Halpin, 2016). Moreover, students showed more favorable perceptions of their Black and Latino teachers across all 7Cs (Cherng & Halpin, 2016). There are great benefits to U.S. education and society from a diverse teaching force which includes aspects of CRP, such as

increased academic achievement and socioeconomic equity. Yet, how pre-service teacher education programs find, support, and retain students of color requires evidence-based strategies for long-term success. The next section examines the literature on effective recruitment, support, and retention of pre-service students of color to foreground the present study.

### **Recruiting, Supporting, and Retaining Students of Color**

For all students enrolled in degree-granting postsecondary institutions in the United States, in 2021, 53% were White students. The enrollment of minority students for the same year was 14% for Asian American students; 12% for Black/African American students; 19% for Hispanic/Latino students; and 2% for others who identified as American Indian, Alaskan Indian, and two or more races (U.S. Department of Education, 2021). These statistics show a concerning deficit of students of color attending post-secondary institutions across all majors, one of the most concerning of which is education. Teachers of color have constituted less than 20% of the U.S. P–12 teaching workforce for more than four decades (Ingersoll et al., 2021). Additionally, though the exact number of students of color entering pre-service teacher education programs is unknown, studies have shown that students of color have many challenges while in college, including financial need, a sense of not belonging and lack of academic support and guidance (James & Temple, 2020; Liu et al., 2017; Ocasio, 2014; Scott, 2018). In many instances, these challenges have caused students of color to withdraw leading to a decrease in retention rates. The following sections include strategies that some pre-service teaching programs have implemented in hopes of recruiting more students of color, followed by ways to support these students while in college, in hopes of retaining them.

## **Recruitment in Pre-service Teacher Education Programs**

Early exposure to career options has been very beneficial to students when choosing a profession and teaching is no exception. Consequently, higher education institutions have often (a) invited prospective students to the open houses of their education programs, (b) offered attendance in education major summer programs, and/or (c) hosted a teaching conference designed for high school students as a way to increase recruitment (Carothers et al., 2019; James et al., 2020). After attending a summer program called EDUCamp, to learn more about applying to college and working in the teaching profession, 95% of high school participants shared that they were either somewhat likely, likely, or very likely to become a future teacher and attend that university (Carothers et al., 2019). Other institutions, such as Howard University, have established middle and high schools on their campus to provide a bridge for minority pre-service teachers who are interested in gaining direct field experience in a school setting (Ginsberg et al., 2017; James et al., 2020). Apart from these strategies, the most common initiatives to recruit students of color into pre-service teacher education programs have included the following:

1. Career pathways
2. Dual-enrollment programs
3. Grow your own programs (GYOP)
4. Collaboration between two- and four-year degree programs for pre-service teachers

### ***Career Pathways and Dual Enrollment Programs***

In a career pathways program, students start gaining professional skills, knowledge, and preparation in a certain career through pre-collegiate experiences (Ocasio, 2014). By comparison, students in a dual-enrollment or early college entrance (ECE) program enroll in classes at their current high school that also provide credit for college level courses. Pending

reciprocity for equivalent courses, these credits can later be transferred after the student is accepted to a college. Forty-eight states and the District of Columbia have state-level dual enrollment policies where students enrolled in such programs can earn college and high school credits simultaneously (Adcock & Surface, 2019; Jamieson et al., 2022; Liu et al., 2017). Career pathways and dual-enrollment programs have been incorporated into some high schools to help students explore their career choices by being exposed to various career curricula and other relevant programming (Ocasio, 2014). Specific to the structure of career pathways, students start gaining professional skills, knowledge, and preparation in a certain career might require early, pre-collegiate experiences (Ocasio, 2014). 48 states and the District of Columbia have state-level dual enrollment policies where students enrolled in such programs can earn college and high school credits simultaneously (Adcock & Surface, 2019; Jamieson et al., 2022; Liu et al., 2017). By being enrolled in these types of programs, students may be more inclined to pursue the same or similar career in college rather than changing their professional pathways (Carrico, 2019).

### ***Grow Your Own Programs (GYOP)***

GYOPs support high school students, community members, and school staff such as substitute teachers and paraeducators to become teachers who teach in the community in which they grew up. Ranging from 1996 and 2016, a review of the literature on grow your own programs (GYOP showed that this type of recruitment programming can be a viable pathway for local high school students and community members to explore teaching as a career, and way for institutions to address the teacher shortage (Esparza et al., 2019; Gist et al., 2019; Liu et al., 2017; Sutchter et al., 2019). Though there are different structures for GYOPs, some of the common configurations include offering academic, social, and financial support to individuals who are interested in pursuing an education degree (Gist et al., 2019). Some of the components



of GYOPs include starting early in high school, earning high school and college credits, offering workshops or classes about teaching degree requirements, and promoting reasons to become a teacher (Hamman et al., 2023). Additionally at the college level, Esparza et al. (2019) found that for 11 Latina natives of South Texas who attended a local Hispanic Serving Institution, emphasis was placed on achieving a teaching certification that offered the ability to work in the community where the pre-service teachers were born.

### ***Two- and Four-Year College Partnerships***

Community college enrollment has grown since the Spring of 2022 while attendance at four-year institutions has declined (National Students Clearinghouse, 2023). Research shows that community colleges tend to be more affordable and have transfer agreements with four-year institutions which are beneficial for students of color (Liu & Ball, 2019; Ocasio, 2014; Simpson & Bista, 2023). Taking into consideration the enrollment rates of students of color at community colleges, a continued collaboration between two- and four-year institutions to help support the success of diverse students is critical (Ocasio, 2014). Furthermore, studies have provided evidence that two-year institutions are gateways to teaching for minority students such as the Latino population (Ocasio, 2014).

While there are other viable strategies to recruit students into pre-service teacher education programs, such as same-race mentorship with working teachers and providing financial incentives, there is either a lack of access or data showing how they specifically affect students of color (e.g., no Latino or Black teachers in a given location to provide a mentorship for a student teacher of color; James et al., 2020). Career pathways, dual enrollment programs, GYOPs, and two- and four-year college partnerships provide students with early exposure to the teaching field and the opportunity to satisfy all the requirements to become a teacher with less

strain. The next section provides a review of the literature on specific retention strategies that higher education institutions can employ to maintain the effective support measures that programs like these institute at the start of the pre-service training experience.

### **Supporting and Retaining Pre-service Teachers**

As students of color continue beyond the first year in college, they may benefit from different types of support such as academic advice, social mentorship, and/or emotional sensitivity to effectively recognize and address microaggressions. When a college provides its students with varying levels of care, it also increases student retention to the benefit of the institution. Vincent Tinto (2006), has written in the field of higher education about models involving student characteristics and the degree to which they feel integrated, suggesting that their interactions with peers and faculty, as well as academic relevance impacts students' sense of fitting into a college environment, which is tied to student dropout rates (Nicoletti, 2019 and Scott, 2018). Conversely, if students feel like they do not belong, experience a lack of financial support, and have other academic, social, or cultural obstacles, retention rates are more likely to drop (Archer et al., 2022; Lefty & Fraser, 2020; Scott, 2018; Smith Kondo & Bracho, 2019; Trent et al., 2021). Research exploring these critical factors of support and retention of students of color in education is further discussed in the sections below.

### ***Belonging to the College Community***

Baumeister and Leary (1995) showed evidence that suggests the need to belong is a fundamental motivation for humans. Unfortunately, before students of color come into college, many may already have had experiences of feeling they do not belong in educational spaces where they are the minority due strictly to their cultural backgrounds (Plachowski, 2019). To explore this concept, Plachowski (2019) conducted a study with eight pre-service teachers of

color at a minority-serving public university. Participants shared their K–12 experiences and how events affected their decisions to become teachers. The author’s findings included that some negative experiences, such as having teachers who did not take the time to know them, failed to offer positive reinforcement during instruction, and perpetuated microaggressions or overt racism against them. Contrary to what one might think, these events influenced their decisions to become teachers (Plachowski, 2019). Sadly, some studies have shown that pre-service teachers of color continue to experience a similar lack of care and racial pathology while attending college (Archer et al., 2022; Scott, 2018).

In a phenomenological investigation of 10 pre-service Black students enrolled in a special education teacher program at a Predominately White Institution (PWI), one researcher stated that nine students felt alienated in their programs (Scott, 2018). Participants reported that these feelings were perpetuated by the lack of infrastructure and resources for the students to engage with students and faculty from similar ethnic backgrounds throughout their classes (Scott, 2018). Furthermore, even when students of color attend institutions expressing a commitment to CRP, there still exists feelings of isolation (Archer et al., 2022; Gist, 2017; Villegas & Lucas, 2002).

In a study at two institutions, one a PWI and the other a Hispanic-serving Institution (HSI) with a commitment to CRP, nine pre-service teachers of color shared their feelings of isolation and of *standing out* due to their race (Gist, 2017). Two participants in the study who attended the PWI specifically shared how they felt isolated during class discussions due to the lack of diversity which caused them to feel like they could not speak freely, or that they had to work overly hard to make a point (Gist, 2017). Other participants attending either institution also felt like they stood out inside and outside of classes and general program areas apart from bilingual and multicultural departments as the White teacher candidates did not connect with

them (Gist, 2017). Struggling to connect within either the college or education program can interfere with the development of a teacher's identity (Archer et al., 2022). Fortunately, having the ability to explore social interactions, experience academic inclusion and support, and obtain financial aid can increase feelings of belonging for students of color at their institutions.

### ***Supportive Peer and Faculty Interactions***

Studies have provided evidence that both negative and positive interactions experienced by students of color with their peers and faculty can play an important role in their college career (Bell & Busey, 2021; Plachowski, 2019; Scott, 2018; Trent et al., 2021). For example, interactions between students of color can be helpful in providing comfort and a shared understanding of challenges (Trent et al., 2021). Nonetheless, research findings also caution against creating assumptions about students from the same race or ethnicity as all may not share similar challenges.

Ayana, a Black participant for Bell and Busey's (2021) study, shared how she would turn to the other four Black students in her pre-service program as peers and mentors in her cohort of approximately 80 students. Yet, she still had feelings of isolation due to the different background experiences that they all uniquely held (Bell & Busey, 2021). Additionally, since there were only a few of them, these Black students did not have classes together within an alternating cohort model (Bell & Busey, 2021). Providing a cohort model could help students of color to decrease their feelings of isolation (Bell & Busey, 2021; Esparza et al., 2019). Esparza et al., (2019) shared how a cohort model aided the students' ability to have "effective communication, emotional support and peer mentoring" (p. 819). In addition, having racially and ethnically congruent peer interactions, students of color are inclined towards creating deeper connections with faculty of color (Bell & Busey, 2021; Scott, 2018; Trent et al., 2021).

A finding from Scott (2018), indicated that eight out of 10 pre-service Black students shared that having faculty of color created safe environments for them to discuss topics regarding inclusion in education. Unfortunately, higher education institutions are also experiencing a continuing diversity gap between faculty and students of color. For the fall of 2021, of the 1.5 million faculty at postsecondary institutions, 73% were White and only 12% were Asian, another 12% were Black or Hispanic, and the remaining 3% were another race-ethnicity (U.S. Department of Education, (2023). This diversity gap in higher education programs causes many students of color to have negative experiences due to cultural incongruence (Archer et al., 2022; Bell & Busey, 2021; Boyd, et al., 2022; Gist, 2017; Elyashiv, 2019).

### *Academic Support*

Classroom practices that include CRP with a diverse array of curriculum and academic support can help students of color feel visible and increase their sense of belonging to the college campus and/or the teaching community (Archer et al., 2022; James et al., 2020; Lefty & Fraser, 2020). Yet, the experiences and backgrounds of students of color should not be used as a pedagogical tool as their experiences are not universally transferable and they should be allowed to feel safe as learners rather than experts (Smith Kondo & Bracho, 2019). Regardless of the representative backgrounds, teaching preparation programs need to incorporate a multicultural and culturally responsive curriculum to better prepare students who will most likely be working with very diverse populations (Lefty & Fraser, 2020). This factor is particularly important for students of color, as a study using nationally representative data reported that 92% of minority teachers were employed in public schools serving predominantly minority students (Ingersoll et al., 2019).

Apart from the curriculum and classroom practices, it is also important to take into consideration that many students of color already come with negative experiences regarding test anxiety and test bias before enrolling in college (Plachowski, 2019; Strachan, 2020). Richard, a participant in Strachan's (2020) study, shared that preparing for the state-mandated assessments was a significant challenge during his teacher preparation program. Additionally, he felt that program personnel did not adequately prepare him for these assessments (Strachan, 2020). Teaching certification requirements and licensure vary by state, where 41 states require teacher candidates to pass a certification exam (James et al., 2020; Motamedi et al., 2018). Meanwhile, though there is no evidence that certification exams are predictors of teaching effectiveness, studies have shown that they are a barrier for students of color due to test bias and racial disparities in standardization (James et al., 2020; Motamedi et al., 2018; Shuls, 2018). For this reason, some states are trying new initiatives to (a) reduce cut-scores, (b) skip exams, and/or (c) prolong the period of time allowed to pass the test (Shuls, 2018; Will, 2022).

In 2021, some states voted on teacher candidates being able to skip the basic skills and subject matter exams as long as they have taken approved college courses (Will, 2022), and in 2022, the state board of education of Missouri voted to give certificates to candidates who score within one standard error of measurement from the average score on their teacher certification exam (Will, 2022). Further, state board of education members in Alabama are considering following the Missouri certification initiative (Will, 2022). Other states such as New Jersey, have implemented pilot programs to give teachers limited certification if they do not meet the minimum GPA or passing score for state licensure (Will, 2022). Although there is concern regarding lowering teacher certification standards to increase teacher diversity, the need for more

research regarding ways of supporting students of color during their teacher certification process is arguably more critical to education, given the multitude of socioemotional aspects of learning.

### ***Support through Field Placements***

Teacher preparation programs require pre-service teachers to participate in field placements also known as field experiences. These placements include observation hours, practicums, and student teaching to expose them to the classroom under the supervision of a certified teacher in the field (Rodriguez-Mojica et al., 2020). During student teaching, the arrangements between a pre-service teacher and the certified teacher represent a partnership between the university and the school districts. The certified teacher in the field, usually called a cooperating teacher, is asked to mentor the pre-service teachers in their classroom for a period of time (Rodriguez-Mojica et al., 2020). Some pre-service teachers have shared that their cooperating teachers lacked appropriate preparation to mentor and support them (Elyashiv, 2019; Pham, 2018; Rodriguez-Mojica et al., 2020). Additionally, some pre-service teachers have been exposed to situations that contradict their classroom learning when placed with cooperating teachers who lacked training in CRP.

In a two-year study, 12 pre-service teachers of color shared their experiences in student teaching during interviews of between 30 minutes and two hours (Rodriguez-Mojica et al., 2020). Some of the findings from the study revealed that participants felt uncomfortable in their placements due to occasions where they observed their cooperating teacher making racist comments or isolating a group of students from the rest due to the students' cultural background (Rodriguez-Mojica et al., 2020). Similarly, in the study of Bell and Busey (2021), two participants shared incidences of microaggression that they experienced during their field placements. For example, Jessica, a Puerto Rican student, shared that her teacher mentor who

was White, gave her a lower grade on the false basis that her frizzy hair did not fit with professional attire (Bell & Busey, 2021). In another instance of a microaggression, Sofia, who also identified as Latina, shared how on her first day of her field placement, she was asked if she spoke Spanish. She felt stereotyped due to her ethnicity, as the teacher mentor did not ask her White counterparts about speaking another language (Bell & Busey, 2021).

Co-placement of pre-service teachers of color in the same field placement can be a way of providing them with internal support against challenges like those mentioned in the studies above. Pham (2018) has studied the success of pairing two pre-service teachers in the same classroom during field placement experiences. Delilah and Robin were responsible for planning and co-teaching two classes during the winter quarter and took over one class each during their student teaching semester (Pham, 2018). One of the findings from Pham's (2018) study showed that the two pre-service teachers of color felt comfortable in sharing ideas with each other for their co-teaching and found ways to confront challenges with their cooperating teachers. Thus, even though they were paired together, they still had opportunities to discover their individual teaching styles (Pham, 2018). Furthermore, there is the reality that individually placed pre-service teachers might lack empowerment to confront struggles faced during their field placements given the power that cooperating teachers have over their teaching evaluations. Co-placements can mitigate this issue (Pham, 2018). Many pre-service students might benefit from such programming supports. Unfortunately, there are other issues facing these teacher candidates such as overcoming stress from the financial expenses of obtaining their college degrees and teacher certifications, which is discussed in the next section.



### *Educational Expenses and Financial Incentives*

In addition to the general college expenses of tuition, room and board, food, textbooks, etc., pre-service teachers also have costs specific to their major, such as transportation expenses when traveling to school sites, exam fees, etc. (Esparza et al., 2019; James et al., 2020). To pay for these necessities, many students have jobs on and/or off campus. For example, one financial challenge for pre-service teachers involves program requirements such as tutoring and field placements. Molly, a Latina participant in the study of Bell and Busey (2021), shared that she had to make financial and academic sacrifices while studying to become a teacher. She described how her program required her to provide tutoring in a school that was 25 minutes away from the college. Spending money for gas and textbooks left her with only \$40 in her account. She also struggled with having a part-time job while focusing on her academics. Time commitments are especially challenging during field placements when being on site for the whole school day requires taking classes at night, resulting in fewer hours to work for wages (Bell & Busey, 2021; Pham, 2018; Rodriguez-Mojica et al., 2020). Molly also mentioned how one of her classmates in the program was forced to dropout as she was unable to complete her field experience due to a lack of transportation (Bell & Busey, 2021).

Other financial challenges for some pre-service teachers include the cost of licensure processing, sitting for exams, gathering endorsements, and paying application fees. James et al. (2020) summarized that teacher candidates from diverse backgrounds tend to experience financial barriers specifically during the licensing process. For example, the State of California requires several assessments for an English teaching certification, each of which are of a relatively high cost (James et al., 2020). Participants in the study of Esparza et al. (2019) shared that they were afraid of having to retake the Bilingual Target Language Proficiency Test

(BTLPT) if they did not achieve a passing score due to the requirement of paying a second registration fee. Despite facing challenging financial circumstances, pre-service teachers of color, as well as others from low-income communities, try their best to continue their pursuit of a career in education (Scott, 2018).

Unsurprisingly, financial assistance has been directly associated with the retention of pre-service teachers of color (Liu et al., 2017). In the northeast, states such as Connecticut (CT), Massachusetts (MA), and New York (NY) have financial initiatives in place to recruit additional teachers of color. More specifically, CT offers a Minority Teacher Incentive Grant Program that provides up to \$5,000 a year for qualifying juniors and seniors enrolled in a full-time pre-service teacher education program (Teach Connecticut, 2022). Moreover, high school students from minority backgrounds with an intent to enter the teaching profession can apply for the Ethnic Minority Future Teacher Scholarship of \$2,000 (Teach Connecticut, 2022). In its 2020-2021 budget, CT also included a loan reimbursement grant for educators of up to 10% of their student loans (Walker, 2022). Finally, a renewable Aspiring Educators Diversity Scholarship for \$10,000 was recently established for pre-service teachers of color who graduated from a public high school in a priority school district and commit to teaching in CT for at least three years (Harkay, 2023).

Similar to CT, MA also has a renewable scholarship called Tomorrow's Teachers. This scholarship program provides diverse pre-service teachers enrolled in an accredited university in MA with financial support of up to \$25,000 per year during college. Once graduated, recipients of this scholarship must commit to working in the state for four years (Massachusetts Department of Higher Education, 2023). Within this same initiative, any public-school teacher who has been working for four years in the state can apply to a connected Tomorrow's Educators

Loan Forgiveness program to repay educational loans (Massachusetts Department of Higher Education, 2023). Lastly, NY offers a specific program to not only increase the percentage of racially diverse teachers, but also increase the percentage of male teachers through NYC Men Teach. The Office of the Mayor together with the New York City Department of Education and the City University of New York (CUNY) created the NYC Men Teach initiative in 2015 with the goal of adding 1,000 male teachers of color into the teacher pipeline (Dubois, 2022). In addition to the aforementioned financial incentives to help cover educational expenses that are disproportionately experienced by pre-service teachers of color, other monetary supports include monthly metrocards, book vouchers, and access to free certification exams and practice tests (James et al., 2020). Though many of these financial initiatives have specific requirements, such as GPA scores and employment commitments, they are significant financial resources that pre-services students of color should be made aware of and would benefit from.

### ***First-Generation Identity***

Another challenge for many Asian American, Black/African American, and Hispanic/Latino students is being a first-generation college student, which can affect their success in college in various ways. *First-generation college student* is a term that has been defined as a student whose parents or guardians did not complete a college degree or students who are first in their family to pursue postsecondary education (Gibbons et al., 2019). Studies have provided evidence that students of color who are also first-generation college students need additional supports, such as transitional activities to help with adjustment to college for students and their families, and mental health supports (Adams & McBrayer, 2020; Bell & Busey, 2021; Schuyler, 2021).

In a study of first-generation students of color at a PWI, the participants shared insights on the importance of family support when going to college (Adams & McBrayer, 2020). The researchers of this study found that the participants felt excited to earn a college degree not only for themselves, but also for their families. The students also felt strongly about not forgetting where they came from. Additionally, many of the participants in the study were not only first-generation college students, but also came from low-income backgrounds and knew the importance of money to gain a higher quality of life. Though they wanted to go to college, the students in Adams and McBrayer's (2020) study had to make decisions based on which institution would be the most cost effective. Many of these students knew that maintaining a job was not optional, but rather a duty to bring in supplemental income while they pursued their degrees (Adams & McBrayer, 2020). Some students reported feeling isolated due to their lack of interaction with college peers who seemed better equipped for the process of becoming an undergraduate (Adams & McBrayer, 2020). Due to the financial, family, and acculturation stressors that first-generation students of color often experience, mental health supports provided on campus are strongly recommended (Schuyler, 2021). Additional recommendations include making sure that counseling centers are welcoming since many first-generation students of color might not seek mental health support on their own due to cultural traditions (Schuyler, 2021).

More research on the experiences of pre-service teachers of color who are also first-generation students is needed. Support systems that are adequate for the needs of pre-service teachers of color who might also have other identities such as first-generation students can help increase their retention in programs. Findings in the literature suggest that higher education institutions that provide them with (a) a strong sense of belonging, (b) positive peer and faculty interactions, (c) academic supports, (d) refined field placements with co-placements, and (e)

creative financial initiatives to reduce stress and incentivize remaining in the field are likely to help pre-service teachers of color succeed in their teacher education programs.

### **Chapter Summary**

In summary, CRT and CRP appear to intersect with concepts regarding effective recruitment, support, and retention of pre-service teachers of color. This chapter has considered how CRT can be used to better understand the marginalized experiences of students of color due to social, economic, and cultural disparities as having a better understanding of key historical and recent events can stimulate CRP matching the characteristics and counter-storytelling needs of students of color for their successful navigation in U.S. society.

While CRT provides a lens through which to visualize how to fight racism and other issues of marginalization, CRP presents pathways to honor multicultural backgrounds and assist future educators to help all their students be successful. Research reviewed in this chapter highlighted both the importance of having teachers of color in the school system, and the reasons why students of color choose or might not select teaching as a career. Additionally, research shows that, when working with pre-service teachers of color, there are specific ways to recruit, support, and retain them beyond the college admission process. For instance, to recruit pre-service teachers of color, programs can start as early as the high school years and continue up to creating partnerships between community colleges and four-year universities. Also, regarding support of pre-service teachers of color, the concept of belonging has played an important role.

Further, by (a) developing strong peer and faculty interactions, (b) increasing faculty of color, (c) including CRP in academic instruction, and (d) ensuring supportive field placement collaborations, teacher education programs can help pre-service teachers of color find role models and gain the best from their higher education experiences. Also important is taking into

consideration the various education expenses of pre-service teachers specific to their major and creating different financial initiatives to increase their commitment to the profession despite cultural and pedagogical challenges. Lastly, it is also imperative to know that pre-service teachers of color can have other identities, such as being first-generation, that may add extra challenges along their training and career paths. These topics create a foundation for the data collection, analysis, and interpretation presented in the upcoming chapters.

## **CHAPTER THREE: METHODOLOGY**

This exploratory qualitative case study was used to investigate the college experiences of students of color in an education program at a public university in the Northeast. This chapter provides details of the methodology used to examine this topic and includes the following sections: researcher positionality, research design, research questions, description of the setting and participants, instrumentation, data collection procedures, data analysis, dissertation timeline, trustworthiness, and statement of ethics.

### **Researcher Positionality**

The researcher plays a vital role in bringing the study to life by using their philosophical orientation and experiences during data collection and data analysis. I am currently a candidate for the Doctor of Education in Instructional Leadership at Welby university where I have learned the process of conducting research studies. I received a Master of Science in Counseling in Higher Education in 2018, focusing on Student Development, and a Bachelor of Science in Secondary Education – Spanish in 2014. Professionally, I have taught Spanish at a middle school and high school for three years; and for the last eight years, I have been the Assistant, then Associate Director for a program that serves first-generation and low-income students.

Working as an educator and in the pre-collegiate program, I have experience in addressing contemporary educational issues outside the classroom during meetings with school and university officials. My primary focus includes working with students from first-generation and low-income backgrounds where I interview families applying for the program and assess their needs. I also have experience as a grant writer, where I collect, review, and interpret current and older data, and create reports. These professional experiences have aligned with my desire to conduct qualitative study.

I am an active participant of the Council for Opportunity in Education (COE), New England Educational Opportunity Association (NEOA), and the Connecticut Association for Educational Opportunity Programs (CAEOP), which promote educational access for first-generation and low-income students. I am also a member of Latino Scholarship Fund Inc. to help increase financial access for Latino students. I am a proud recipient of a leadership award by the American Dream Foundation for my outstanding work with the immigrant community. Some of my previous presentations include Identity in the Classroom, Ethnic Identity Development and Acculturation, Educational Access - TRIO programs, and Creating Partnerships with Parents of First-Generation College Students. These experiences, especially those with the college students have prepared me to understand the dynamics of the higher education environment. Additionally, being a student of color has helped me expand my lens to the different experiences that current students of color are facing.

### **Research Design**

The study followed an exploratory qualitative collective case study approach (Merriam, 1998). Qualitative research is used to explain a social phenomenon where the researcher is interested in the lived experiences of the participants (Holliday, 2016; Merriam, 1998). A case study can be understood as the intensive investigation of one or more cases with the purpose of understanding a larger population (Gerring, 2011). Case “connotes a spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time” (Gerring, 2011, p. 5). This study included a collection of cases, referred to as a collective case, which Stake (2000) recommended for a researcher to use when combining individual cases to understand a phenomenon.



Many definitions of case study have been researched over the years, and the approaches of Yin, Merriam, and Stake are commonly used in education (Yazan, 2015). Merriam's approach of case study came closer to the researcher's interest of studying a case as a bounded system (Merriam, 1998; Miles & Huberman, 1994). In this qualitative study, a collective case study approach was utilized to gain an in-depth understanding of a group of students of color enrolled in a pre-service teacher education program in one of the public universities in the Northeast. The case collective included students of color enrolled in a pre-service teacher education program bounded by being full-time undergraduate students enrolled in education classes during the spring semester.

### **Research Questions**

This exploratory qualitative case study addressed the following research questions.

1. What factors influenced the decisions of individuals of color to pursue a career in teaching?
2. What are the perceptions of undergraduate students of color for staying in a pre-service teacher education program?
3. What recommendations do undergraduate students of color give to help recruit, support, and retain students of color in a pre-service teacher education program and for the teaching profession in general?

### **Description of the Setting**

Pseudonyms are used to maintain confidentiality of the university and participants. The study was conducted in Welby University, located in the Northeast of the United States. Welby is composed of four academic schools and has two campuses. It is a public university with both graduate and undergraduate programs. A total of 4,000-4,500 undergraduates are full-time ( $n = 3,440$ ) and part-time ( $n = 732$ ). For the entering undergraduate class of Fall 2021, women

comprised 49.7% and members of historically underrepresented racial and ethnic groups comprised 48.0% (U.S. Department of Education, 2022). For the teaching faculty, 205 are full-time and 359 are part-time. The student to faculty ratio for Fall 2021 was 12 to 1 (U.S. Department of Education, 2023). For the year 2020-2021, 40% of the enrolled students received Pell Grants (U.S. Department of Education, 2023). These grants are awarded to undergraduates who are documented as having exceptional financial need. Welby university recently received HSI status with more than 25% of the student population being Hispanic/Latino (U.S. Department of Education, 2024).

The teacher preparation program accredited by the Council for the Accreditation of Educator Preparation (CAEP) provides pathways for Elementary (K-6), Secondary (7-12), and Dual Certification (K-12) programs at Welby University. For the Spring 2023, there were 111 students enrolled in the education program. Out of these students, 3 identified as Asian American, 20 identified as Black/African American, and 4 identified as Hispanic/Latino (J. Wilcox, personal communication, June 26, 2023).

### **Participants and Sampling Procedures**

Permission was obtained to conduct the study from the Dean of the School of Professional Studies (Appendix A), the Chair of the Education & Educational Psychology Department (Appendix B), and seven professors who conducted the classes from which the sample of pre-service teachers were selected (Appendix C). This study did not follow a probabilistic sampling strategy as the goal was not to make statistical sense from the data (Merriam, 1998). One of the most common forms is purposive sampling which helps researchers select cases that are information-rich (Merriam, 1998; Patton, 1990). Furthermore, this study followed Patton's criterion guidelines for purposive sampling (Patton, 1990). To qualify for this

study, the participants were selected using a predetermined criteria Each participant was enrolled as full-time undergraduate education major, who self-identified as Asian American, Black/African American, or Hispanic/Latino.

All students of color were invited to participate in this study with a goal to recruit 25 participants. In total, 22 participants consented to participate in the research study (Appendix D and E) and 20 participants completed all aspects of the study.

Each pre-service student of color in the teacher preparation program who agreed to participate in the study represented a case and data analysis took place within and across cases. A quick overview of participant demographics is included in Table 3. Pseudonyms have been assigned to each student and are positioned in alphabetical order.

**Table 3**  
*Participant Demographics*

Pseudonym	Race/Ethnicity	Grade Level Classification	Degree Program	Grade Point Average (G.P.A) Range	Employed
Alba	Hispanic/Latino	Senior	Bachelor of Science in Elementary Education: Interdisciplinary Major	2.5 – 3.0	Yes
Antonia	Mixed Race (White & Hispanic/Latino)	Senior	Bachelor of Science in Secondary Education: English	3.6 – 4.0	No
Bae	Asian American	Junior	Bachelor of Science in Music Education	3.6 – 4.0	Yes
Daisy	Hispanic/Latino (Peruvian)	Sophomore	Bachelor of Science in Music Education	3.1 – 3.5	No
Edith	Hispanic/Latino	Senior	Bachelor of Science in Secondary Education: Spanish	3.6 – 4.0	No
Eleanor	Hispanic/Latino	Junior	Bachelor of Science in Elementary Education: Interdisciplinary Major	3.1 – 3.5	Yes

Pseudonym	Race/Ethnicity	Grade Level Classification	Degree Program	Grade Point Average (G.P.A)	Employed
				Range	
Eva	Hispanic/Latino	Senior	Bachelor of Science in Elementary Education: Interdisciplinary Major	3.6 – 4.0	Yes
Gabriel	Hispanic/Latino	Senior	Bachelor of Science in Elementary Education: Interdisciplinary Major	3.6 – 4.0	Yes
Gabriela	Hispanic/Latino (Brazilian)	Junior	Bachelor of Science in Secondary Education: English	3.6 – 4.0	Yes
Jacqueline	Hispanic/Latino	Junior	Bachelor of Science in Secondary Education: History/Social Studies	3.6 – 4.0	No
Jasmine*	Mixed Race (White & Black)	Sophomore	Bachelor of Science in Secondary Education: English	3.1 – 3.5	Yes
Julieta	Hispanic/Latino	Junior	Bachelor of Science in Music Education	3.6 – 4.0	Yes
Kiara	Mixed Race (Hispanic/Latino and Half Afro- Dominican)	Junior	Bachelor of Science in Secondary Education: English	3.1 – 3.5	Yes
Malone*	African American	Senior	Bachelor of Science in Secondary Education: Mathematics	3.1 – 3.5	Yes
Maria	Hispanic/Latino	Junior	Bachelor of Science in Elementary Education: Interdisciplinary Major	3.6 – 4.0	Yes
Maribel	Hispanic/Latino (Brazilian)	Sophomore	Bachelor of Science in Elementary Education: Interdisciplinary Major	3.1 – 3.5	Yes
Matias	Hispanic/Latino (Mexican)	Sophomore	Bachelor of Science in Music Education	3.6 – 4.0	No
Regina	Hispanic/Latino	Senior	Bachelor of Science in Secondary Education: Mathematics	3.1 – 3.5	Yes
Reina	Hispanic/Latino (Ecuadorian)	Sophomore	Bachelor of Science in Secondary Education: Spanish	2.5 – 3.0	Yes

Pseudonym	Race/Ethnicity	Grade Level Classification	Degree Program	Grade Point Average (G.P.A) Range	Employed
Roberta	Hispanic/Latino	Junior	Bachelor of Science in Secondary Education: English	3.6 – 4.0	Yes
Sergio	Hispanic/Latino	Sophomore	Bachelor of Science in Secondary Education: History	3.6 – 4.0	Yes
Sofia	Hispanic/Latino	Sophomore	Bachelor of Science in Music Education	2.5 – 3.0	Yes

*Note.* \*Participants did not complete the interviews for the research study.

An overview of each student is provided, focusing on student demographics and some related highlights of their lived experiences. Only individuals who completed the interviews are included in the remainder of the study.

#### *Alba*

Alba's age range was 24 to 25 years, and she was in her 5<sup>th</sup> and final year of the program. She was a senior who self-identified as Hispanic/Latino. At first, she started to pursue a career in social work and changed her major after the first semester. She was pursuing a Bachelor of Science in Elementary Education: Interdisciplinary Major as she was inspired by her mother who was a teacher at a daycare center. At the time of the study, Alba worked on campus and helped to plan different recruiting events for new students.

#### *Antonia*

Antonia's age bracket was 21 to 23 years. She identified as being mixed race, White and Hispanic/Latino, more specific from Portuguese and Spanish descent. She was enrolled in the Bachelor of Science in Secondary Education: English. She started her journey in higher education at a community college and stayed there for two years before transferring to Welby.

#### *Bae*

Bae identified being at the age range of 21 to 23 years old. He was enrolled in the Bachelor of Science in Music Education. He identified himself as Asian American and talked about his love for teaching music ever since he was in middle school. In the fall, he had an amazing experience teaching marching band and percussion at the high school from which he graduated.

### *Daisy*

Daisy was in the age bracket of 18 to 20 years old. She was enrolled in a Bachelor of Science in Music Education. She shared that her primary instrument is the clarinet and that she was the only clarinet player in the university. This role made her feel a lot of pressure. Additionally, she was also a first-generation college student who self-identified as Hispanic/Latino from Perú.

### *Edith*

Edith was a 21-year-old who was in her last year of college. She came from the Dominican Republic when she was 5 years old. In high school, she participated in a dual-enrollment teacher program where she was exposed to teaching as a career. She has chosen to be Spanish teacher due to the lack of "Latino" teachers in her high school.

### *Eleanor*

Eleanor was a 26-year-old who came to the United States when she was 19. Her first language was Spanish. She started taking classes in higher education at a community college where she learned English and was studying to be a physical therapist. She did not like learning about the body's bones and changed her degree to education to work with elementary students. She was in her junior year and has enjoyed her classroom experience in the professional semester, the first-time students are immersed in the elementary school environment (part-time),

prior to full-time student teaching. She has been volunteering and working with kids since she was 11 years old.

*Eva*

Eva was in the age range of 21 to 23 years. She was pursuing a Bachelor of Science in Elementary Education: Interdisciplinary Major. She identified as Hispanic/Latino and emphasized that her parents were from El Salvador. She has always wanted to be a teacher since she had two younger sisters with whom she played pretend teacher in a classroom.

*Gabriel*

Gabriel was in the 24-to-25-year age range. He was a student pursuing a Bachelor of Science in Elementary Education: Interdisciplinary Major. He was a commuter student who transferred from one of the community colleges in a neighboring state. He talked about how his grandma is a music teacher and pianist back in the Dominican Republic. His grandma was his major influence for becoming a teacher.

*Gabriela*

Gabriela was a 21-year-old who identified herself as being Hispanic/Latino from Brazilian descent. She shared that she has always enjoyed English class and working with children. Additionally, since high school, she has volunteered in bilingual classes where she has enjoyed helping students who speak Portuguese.

*Jacqueline*

Jacqueline was in the age range of 21 to 23 years. She wanted to be a history teacher. She was in her 4th year but was staying in college an extra year to complete two minors, one in political science and another in social studies. In high school, she completed a dual enrollment

program where she had the opportunity to explore teaching as a career. Through this program, she realized that she definitely wanted to become a teacher.

### *Julieta*

Julieta was in the 18- to 20-year-old age range. She was enrolled in the Bachelor of Science in Music Education. Her parents were from Brazil, and she shared that she was a first-generation college student. Additionally, she described how her parents and some of their friends had a hard time helping their children since they did not know English. She has always been in love with music from playing the piano, taking voice lessons, and singing in the choir at church.

### *Kiara*

Kiara's age bracket was 21 to 23 years old. She was pursuing a Bachelor of Science in Secondary Education: English. She identified as being of mixed race as she was Hispanic/Latino and Afro-Dominican. She shared that she had a lot of family members who were educators including her mom, who was a teacher.

### *Maria*

Maria's age bracket was from 21 to 23 years old, and she was enrolled in the Bachelor of Science in Elementary Education: Interdisciplinary Major. She lived on campus and had two jobs working with children. She worked at the local YMCA and was a teacher substitute in one of the neighboring towns. Since high school, she volunteered at elementary schools where she found her love for teaching.

### *Maribel*

Maribel was in the age range from 18 to 20 years old and she was enrolled in the Bachelor of Science in Elementary Education: Interdisciplinary Major. She shared that both of her parents immigrated from Brazil, and she self-identified herself as Hispanic/Latino. Prior to



transferring to Welby, she started her college career as an education major but decided to change it to business within the first year. Then, she came to Welby and changed it back to education. She was happy about that decision.

### *Matias*

Matias was a 20-year-old enrolled in the Bachelor of Science in Music Education. He revealed that his parents were Mexican and that he learned Spanish from a young age. Also, he was involved in a jazz band and choir. His main instruments were the guitar and the clarinet, yet he decided to focus on the guitar during college. Furthermore, he shared that his main influence for becoming a teacher was his middle school teacher who was also the band director.

### *Regina*

Regina was a 21-year-old and wanted to teach mathematics. She shared that she was an English Language Learner (ELL) as a high school student and came to this country when she was 17 years old. Furthermore, she voluntarily disclosed her status as an undocumented student and how this situation caused her to add an extra year to her college program due to academic and financial reasons.

### *Reina*

Reina was a 30-year-old non-traditional student who wanted to teach Spanish. She was born in Ecuador and came to this country when she was 24 years old. She was an English Language Learner (ELL) and first started her college education by taking classes at a community college.

### *Roberta*

Roberta was a 20-year-old pursuing a Bachelor of Science in Secondary Education: English. She identified as Hispanic/Latino and as a first-generation college student. She gave

credit to her 6th grade English teacher as an influence for her to pursue this career. She shared that she was an activist for the undocumented and immigrant population.

*Sergio*

Sergio's age was in the 18- to 20-year-old range. He decided that he wanted to be a history teacher. At first, he thought that he wanted to be a marine biologist due to his obsession with sharks. Once finding out more about that career, he realized that he was going to follow his love for history and follow in his mom's steps of becoming an educator.

*Sofia*

Sofia was a 19-year-old pursuing a Bachelor of Science in Music Education. She identified as Hispanic/Latino and noticed that in her K-12 years she had mostly had White music teachers. She shared how she failed her first education class, since it was online due to COVID-19, but she stayed in the program and passed it successfully when she retook it in-person.

### **Instrumentation**

This study utilized two instruments for data collection. The following steps were taken to provide content validity for the Student Demographic Questionnaire and Interview Protocol. Both instruments were aligned with the research questions. Furthermore, both instruments were reviewed by the dissertation co-chairs who are both experts in qualitative research and working with students of color. Lastly, the instruments were reviewed by a student of color who is a current educator at a local high school.

#### **Student Demographic Questionnaire (SDQ)**

The researcher created the SDQ to gather basic demographic information from the participants (Appendix F). The questionnaire included information regarding, gender identity, race/ethnicity, age, grade level classification, enrollment status, grade level certification, content

major, G.P.A., English as a Second Language (ELL) classification, special education classification, employment, and a question about whether or not the student had ever changed careers.

The questionnaire also included information to coordinate the interview portion of the study. Data from this questionnaire was only used descriptively in the results.

### **Interview Protocol**

“Interviewing is a basic mode of inquiry” (Seidman, 2019, p. 8). It is a way to find out information from participants that you cannot directly observe (Merriam, 1998; Patton, 1990). Semi-structured open-ended interviews were used to allow participants’ interpretation of the world in their unique way (Merriam, 1998). Semi-structured interviews allowed flexibility in the flow of the conversation. This form of interviewing provided the opportunity to ask follow-up questions and gain deep information in certain areas. The interview protocol can be found in Appendix G, where questions regarding educational experience, major decision influencers, and recommendations for ways to increase the number of students of color in education are included. Table 4 provides an alignment of the research questions for this study with the semi-structured student interview questions, and the supportive constructs related to the study.

**Table 4*****Research Question with Data Sources***

Research Question	Semi-Structured Student Interview Question	Construct
1. What factors influenced the decisions of individuals of color to pursue a career in teaching?	Q1, Q2	Retention, Reason for Choosing Teaching as a Career
2. What are the perceptions of undergraduate students of color for staying in a pre-service teacher education program?	Q3, Q4, Q5	Retention, Diversity of students and teachers
3. What recommendations do undergraduate students of color give to help recruit, support, and retain students of color in a pre-service teacher education program and for the teaching profession in general?	Q6, Q7, Q8, Q9	Recruitment, Supports that College Provided

*Note.* All Interview questions appear in Appendix G.

### **Data Collection Process**

Approval from the Institutional Review Board (IRB) was obtained in November 2022, before any data were collected. Each data collection source is described below.

#### **Student Demographic Questionnaire (SDQ)**

After receiving permission and consent, an invitation was sent by the Chair of the Education & Educational Psychology Department on the researcher's behalf (Appendix D) to 111 students enrolled in the education program along with the Student Demographic Questionnaire. The email was sent to all the 111 students enrolled in the education program as the researcher wanted to give each student the opportunity to self-identify as a student of color. Second, the researcher had the opportunity to promote the study in seven different education courses. Flyers with a QR code of the student demographic questionnaire were distributed to each student present in these courses. Third, flyers and social media posts were created to

promote the study around the Education & Educational Psychology department and university events bulletin board.

The Student Demographic Questionnaire was completed using Google Forms, taking no longer than 5 minutes to complete. Google forms generated collected responses into a Google sheet that was converted to an Excel file and stored on the researcher's hard drive. Data were collected between January 2023 and May 2023.

### **Interview**

The researcher scheduled interviews within a week of the completion of the Student Demographic Questionnaire, where students shared their contact information. In-person or virtual interviews via Zoom took place between January 2023 and May 2023. These semi-structured open-ended interviews were designed to be approximately 20-25 minutes in duration. All interviews were voice recorded using Zoom to allow the researcher to focus on the participant's responses during the interview. Recordings were stored in a password protected computer to ensure the privacy of the participants. NVivo's transcription service was used to turn the audio data into text. Then, the researcher reviewed each transcript and edited any information that was not correctly transcribed. Lastly, to help with the accuracy of the data, participants were asked to review their interview transcript and provide any clarification and adjustments, as recommended by Merriam and Tisdell (2016).

### **Data Analysis**

Lived experiences of students of color enrolled in a pre-service teacher education program were first collected, then the data analysis process and the writing of it brought these stories to life. For this exploratory qualitative case study, each pre-service student of color in the

teacher preparation program represented a case and data analysis took place within and across cases.

### **Student Demographic Questionnaire**

The data from this questionnaire was analyzed descriptively to supplement each participants' profile.

### **Interview**

Thematic analysis was used based on the six-step guidelines from Braun and Clarke (2006). Braun and Clarke (2006) describe thematic analysis as a method used for “identifying, analyzing, and reporting patterns (themes) within the data” (p. 6). This type of analysis gave the researcher the flexibility to use inductive and deductive approaches (Braun & Clarke, 2006). Braun and Clarke (2006) also advised that analysis is not a linear process but rather a recursive process that moves back and forth as needed. Different themes were developed from the coded data by following this method and conducting in-depth and repeated discussions about the codes, categories, sub-themes, and themes with the researcher's Dissertation Chair.

#### ***Phase One: Familiarizing Yourself with Your Data***

In-person and virtual interviews were voice recorded via Zoom. These audio data were then transferred to the NVivo software to create the first transcription of the interviews. NVivo software was used to transcribe the interviews as well as organize coding of the data. After the initial transcriptions were complete, the researcher listened to the audio recordings and edited as needed. This step ensured the accuracy of transcripts against the original audio. After a final review of an entire transcription, the final transcription was sent to each participant for any feedback and additional editing. Only one participant wanted to expand her answer to one of the questions.

### ***Phase Two: Generating Initial Codes***

Coding took place manually and with the use of the NVivo software. The initial coding gave the researcher the opportunity to organize the data into meaningful groups, keeping in mind that “extracts can be uncoded, coded once, or coded as many times as relevant” (Braun & Clarke, 2006, p. 19). The researcher manually coded all transcripts within their own word document. After all transcripts were initially coded, the researcher and Dissertation Chair re-read the transcripts and made updates to the codes as needed. It was important to make sure the initial code given was close to the meaning of the segment of data. Initial codes were developed as both word codes, such as ELL, ADHD, career indecision, check-ins, college, discrimination, enjoyment, field experiences, immigrant, mentoring, observations, racism, salary, and single phrases, such as Applied to a sub, receive payment, and get hours for field experience, being the only person of color in the classroom you don’t realize how different your mentality is, better understand paraprofessionals since she has been a substitute, don’t think teaching is really that high up on the like dream career list, first-generation students do not have support at home for applying to college, minority program support to have teachers of color speak to students, some Hispanic or Latinos don’t want to go into teaching because they have an accent, and writing and tutoring centers are helpful great resources available. Once there was a satisfaction with the initial manual coding in word, the researcher added the codes into the NVivo software and there was a total of 298 initial codes. At this time, the researcher let the data sit for a few days and went back to cleaning the initial codes to make sure there were not multiple codes that had the same meaning across transcripts. This process gave the researcher the opportunity to create a more cohesive set of codes and the final list resulted in 242 codes.

### ***Phase Three: Searching for Themes***

During this phase, the goal is to sort the “different codes into potential themes and collate all the relevant coded data extracts within the identified themes” (Braun & Clarke, 2006, p. 19). The researcher started going through the codes and identifying general sub-themes that could potentially turn into main themes by thinking about the relationship between codes. This process produced 23 initial sub-themes from the 242 codes which included External obstacles, Individual obstacles, Negative field experiences, Collegial motivation, Personal motivation, Student-focused motivation, To make a difference, First-generation college student, Interest in teaching, Resilience, Early engagement, Financial backing, Minority status acknowledgement, Programmatic considerations, Workload considerations, Community-based program culture, Positive field experiences, Program satisfaction, No direction, Social controversy, Social divestment, Marketing and promotion, and Programmatic strategies. The names of some of the sub-themes were changed after a review was performed by the Dissertation Chair. The main reason for some of the changes was to make sure the name of the sub-theme was clearly related to the codes that it represented. For example, the initial sub-theme of (First-generation college student, Immigration and Language Status) was changed to be called Personal Origins, and (First-generation college student, Immigration and Language Status) became categories of this sub-theme. During this review, the researcher also combined sub-themes bringing the total to 21 sub-themes. At this step, the researcher had 242 codes, 65 categories, and 21 sub-themes.

### ***Phase Four: Reviewing Themes***

To start this phase of the process, the codes were downloaded to a spreadsheet, where each code was related to the corresponding interview question and research question. Using the NVivo output, the researcher then analyzed each code, the response extract, and the



corresponding interview question. This was helpful as it was used to see the alignment of the interview question with the overall research questions. For example, the code “immigrant parents” had one reference extract which came from interview question 6 (Why do you think there is a shortage of students of color in education?) which aligned with research question 3 (What recommendations do undergraduate students of color give to help recruit, support, and retain students of color in a pre-service teacher education program and for the teaching profession in general? Using this process, the researcher felt confident that the collated extracts for each theme were used to form a coherent pattern with enough data to support them (Braun & Clarke, 2006). After re-reviewing the 242 codes and the corresponding extracts, and conducting an analysis of the 21 sub-themes, seven possible main themes were developed. These included (Career deterrents, Career motivators, Educators of color profile, Needed resources, Program Pros, Reasons for shortage, and Recruitment ideas). Similar to the final process for phase 4, the names of some of the themes were changed after a review was performed by the Dissertation Chair. The main reason for the changes was to make sure more current vocabulary was used. For example, the theme of (Educators of color profile) was changed to (Characteristics of Educators of Color).

#### ***Phase Five and Six: Defining and Naming Themes and Producing the Report***

During these steps, the researcher needs to be able to identify the essence of what each theme is about and highlight “what aspect of the data each theme captures” (Braun & Clarke, 2006, p. 22). In addition, the analysis write-up should provide a “concise, coherent, logical, non-repetitive, and interesting account of the story the data tell – within and across themes” (Braun & Clarke, 2006, p. 23). The final seven themes were reviewed to come up with a reporting order that best highlights the data regarding the research questions. When doing this process, the

researcher noticed overlap between some of the sub-themes and themes. This caused another review of the codes, categories, sub-themes, and themes. After re-reviewing the 242 codes, the researcher made the decision to combine and rename some categories, and combine some of the sub-themes, and themes to make sure there was no redundancy of the information being presented. The end results included 242 codes, 51 categories, 15 sub-themes, and five themes.

The analysis write up will include the following themes and sub-themes.

Theme One: Characteristics of Educators of Color

Sub-themes: Personal Origins, Internal Obstacles, and Resilience

Theme Two: Education Career Motivators

Sub-themes: Internal Motivators, External Motivators, and Experience Working with  
Students

Theme Three: Education Program Pros

Sub-themes: Positive Education Program Culture, Program Satisfaction, and Positive  
Field Experiences

Theme Four: Career Deterrents for an Education Major

Sub-themes: Social/Cultural Issues in Education, High School Preparation Issues,  
College Access and Preparation Issues, and Teacher Working Environments

Theme Five: Ideas to Recruit and Retain Pre-service Teachers of Color

Sub-themes: Marketing and Promotion, and Programmatic Strategies

Appendix H shows the codebook, which is organized by themes and sub-themes,  
including frequencies for all codes.

## Dissertation Timeline

A dissertation defense took place in April 2024. A review of the timeline took place throughout the study.

**Table 5**

***Data Collection Procedures and Timeline***

Task	Completion Date
Institutional Review Board (IRB)	November 2022
Data Collection	January - May 2023
Write Chapters 1, 2, 3 of Dissertation	Summer 2023 / Fall 2023
Data Analysis and Write Chapter 4 of Dissertation	Winter 2023 / Spring 2024
Write Chapter 5 and Chapter Revisions	Spring 2024
Dissertation Defense	May/April 2024

## Trustworthiness

In a qualitative study, the researcher is essential to creating meaning and understanding; therefore, steps need to be taken to make sure the study is trustworthy (Merriam & Tisdell, 2016). Lincoln and Guba (1985) recommend that a study should have credibility, transferability, dependability, and confirmability to be trustworthy.

## Credibility

Credibility is subject oriented based on the discovery of human experiences (Krefting, 1991). The researcher needs to be open to the subjective truth of the experiencer (Krefting, 1991). This researcher has experienced working with students of color and identifies as Hispanic/Latino (See Researcher Positionality). Nonetheless, reflection and journaling were used to recognize her own subjectivity. There was additional engagement with the participants by having

the interviewees review their transcripts as a form of member checking recommended by (Krefting, 1991). Lastly, there was an in-depth examination of findings using thematic analysis with a data audit that tied the codes to the actual data.

### **Transferability**

Transferability includes having findings that can be viewed as applicable to other settings (Krefting, 1991). The researcher provided a rich description and dense background about the research methods, participants, and setting. There was a constant check for data accuracy and the researcher kept a detailed journal of the progress of the study.

### **Dependability**

Dependability includes consistency from participants' responses to the findings of the study (Krefting, 1991). The researcher also compared findings with other studies that have been conducted on the topic. The research is being conducted at a public university in the Northeast that is accredited by the Council for the Accreditation of Education Preparation (CAEP) with a curriculum and practices that are typical of other CAEP teacher preparation programs.

Triangulation was supported through the comparison of participants' responses while coding and synthesizing the codes to form categories, sub-themes, and finally, themes (Krefting, 1991).

Additionally, the demographics of the participants will allow any future readers of this study to make comparisons to other teacher preparation programs.

### **Confirmability**

Confirmability states that another researcher has the ability to arrive at comparable conclusions with the same data and context (Krefting, 1991). The Dissertation Chairperson conducted a confirmability audit to reduce bias on the part of the researcher and search for consistency in the results.

## **Statement of Ethics**

Institutional Review Board (IRB) approval preceded all data collection, and the researcher was in possession of a valid Human Subjects Certificate from the IRB as were all dissertation committee members. The names of all participants in this study and any implicit or explicit reference to their organizations were referenced only using pseudonyms in all reports. Additionally, names and potential identifiers were redacted from written archival artifacts included in the study to protect the confidentiality of each individual and organization. The data were stored on a password-protected electronic device and any data on paper was locked in a filing cabinet by the researcher. Coded data were only available to the Dissertation Chairperson for the purpose of data verification, coding, and analysis. Participants were asked to sign a consent form (Appendix D) prior to the initial data collection, which included an explanation of their right to opt out of the study at any time and their choice to approve or deny any data collected prior to this point of decision. Reports will be prepared and disseminated via conference presentations and publications. Consent was also obtained to use retained de-identified data so it could be combined in the future with other similar data sets under the direction of the principal investigator and/or researchers connected with this study.

## CHAPTER FOUR: RESULTS

This qualitative case study was designed to better understand the college experiences of students of color in an education program at a public university in the northeast of the United States. This purpose was addressed by the following research questions:

1. What factors influenced the decisions of individuals of color to pursue a career in teaching?
2. What are the perceptions of undergraduate students of color for staying in a pre-service teacher education program?
3. What recommendations do undergraduate students of color give to help recruit, support, and retain students of color in a pre-service teacher education program and for the teaching profession in general?

An analysis of the data from the 20 in-depth interviews revealed five major themes about students of color in an education program. To better describe the essence of their experiences using their own voices, direct quotes from the participants are used throughout the findings. Themes one – three focus on the positive events and outcomes reported by the pre-service teachers while themes four and five display some obstacles on the pathway to becoming a teacher and suggestions for supporting individuals of color to become teachers. Table 6 portrays an overview of the themes.

**Table 6**

***Emergent Themes with Definitions, Sub-themes, and Categories***

Theme	Brief Definition	Sub-themes	Categories
Theme One: Characteristics of Educators of Color	These features include personal origins (immigration status, language status, and first- generation college student), as well as qualities of personality,	Personal Origins	Immigration Status Language fluency First-Generation College Student

Theme	Brief Definition	Sub-themes	Categories
	such as how to overcome internal obstacles and the meaning of resilience.		
		Internal Obstacles	Academic Difficulties Personal Difficulties
		Resilience	Experiences with racism Excluded because of race College processes Ability to cope and positive mindset
Theme Two: Education Career Motivators	These components address participants' perceptions that early interest in teaching, experience working with students, internal motivators, and external motivators play a role when choosing teaching as a career.	Internal Motivators	Passion for a subject Desire to make an impact in this world Be a role model
		External Motivators	Family Members Previous Teachers Job Availability
		Experience Working with Students	High school experiences College experiences
Theme Three: Education Program Pros	Participants describe their perceptions of Welby's education program, which include having a positive education program culture, satisfying program experiences, and successful field experiences.	Positive Education Program Culture	Faculty interactions Cohort member interactions
		Program Satisfaction	Many classroom practices Professional opportunities
		Positive Field Experiences	Experiences in K-12 schools since freshman year Seeing both middle school and high school levels Improved lesson delivery over time

Theme	Brief Definition	Sub-themes	Categories
Theme Four: Career Deterrents for an Education Major	Items such as social/cultural/high school/college preparation issues, and the teacher working environments are career deterrents for an education major.	Social/Cultural Issues in Education	Lack of teachers of color Mostly female teachers Lack of a diverse curriculum Social perceptions of teaching as a career
		High School Preparation Issues	No guidance on different levels of high school classes Limited access to counselors Exclusion from AP classes and other college planning
		College Access and Preparation Issues	Stigma, college not a necessity College not affordable Extra cost by being an education major Not enough diverse staff members and curriculum Workload considerations Lack of tutoring and preparation Staff leaving department which causes issues
		Teacher Working Environments	Differences of funding between districts School safety Limited classroom space for teaching special content (e.g., music) Low pay COVID-19 aftermath
Theme Five: Ideas to Recruit and Retain Pre- service Teachers of Color	Participants offer suggestions such as the increase of marketing and promotion to recruit more students as well offer suggestions to the program leaders to retain pre-service teachers of color.	Marketing and Promotion	Start early in high school Offer workshops specific to parents Promote classes or programs students can take at the college while in high school



Theme	Brief Definition	Sub-themes	Categories
		Programmatic Strategies	Acknowledge the minority students Hire more teachers of color Require a diversity class Find ways to reduce the college financial burden

### **Theme One: Educators of Color Characteristics**

The first theme titled Characteristics of Educators of Color revealed that apart from the racial/ethnic diversity that our participants shared, there were other experiences that they had in common. The following three sub-themes were identified: personal origins, internal obstacles, and resilience. Personal origins relate to the undergraduate’s personal profile and family history. This includes whether each was a first-generation college student, their immigration status, and their language fluency. The Internal obstacles’ sub-theme describes the impact that lack of self-confidence and other personal doubts can have on a college student. The resilience sub-theme addresses the different ways that students of color adapt to challenging life experiences.

#### **Personal Origins**

Participants described their background as an essential component of their college experience. Many included their familial background as well as their own. Aspects of participants’ background were influenced by their first-generation college student status, their immigration status, and their language fluency status. Even though it was not a requirement for the study, the data collected revealed that all 20 participants had parents who were born in another country and were immigrants to the United States. There was a sense of pride when sharing their stories as well as a sense of sadness as participants remembered their own struggles and those of their family members. Eva was proud of both her own and her parents’ backgrounds, stating: “Well, I am from a Hispanic background. My parents are both from El

Salvador. They are actually over there right now.” Moreover, Julieta shared the language struggle that her family experienced when arriving in the United States by saying,

My family came from Brazil and ... it took a while for them to ... know English, so I feel like people who are immigrants or people who don't really know how to speak English, they need to have more people who are able to connect with them. (Julieta)

Further exploration of the data showed that seven participants were immigrants. Eleanor shared that she came to this country as an adult by stating, “OK, so I came here to the United States when I was 19 from Ecuador.” Reina who identified as being a Hispanic/Latino from Ecuador, shared her struggle to connect and adapt, expressing,

Especially a minority like me, coming for the first time to the United States and not having that proper education and especially not having someone to connect with, it was hard to adapt to the culture and all that kind of stuff. (Reina)

Eva and Reina were both immigrants, yet their stories were different as Eva came as an adult and Reina came as a teenager. The participants' age when arriving in this country plays a key role when examining and understanding their educational experiences.

Apart from being immigrants themselves or having parents who were immigrants, two participants also shared having an undocumented status. It is important to remember that the term *undocumented* describes “a foreign national who entered the United States without inspection or with fraudulent documents or who entered the United States legally as a nonimmigrant but violated the terms of the visa status and remained in the United States without authorization” (Kim, 2013, p. 55). Regina shared that her parents brought her to this country when she was a teenager, and she knows that there is a lack of opportunities due to her legal status, when she commented, “I feel like there should be additional resources, but especially

speaking from my side: I'm not only an immigrant, but I'm undocumented so I feel like there's a lot of opportunities that I'm missing from."

Apart from the immigration status, seven participants also discussed their educational experiences being English as a Second Language (ESL) students. Regina disclosed that she attended ESL classes during high school, stating, "I moved here when I was 17. So, I started school my junior year in high school as an ESL student." Furthermore, she explained how she felt supported by her ESL teachers when sharing,

Exactly. So that's where my teachers come into play and especially it was mostly my ESL teachers. They were the ones that understood the struggle of transitioning from another place, they were the ones that understood that we didn't know everything that we needed to. Basically, we needed a freshman seminar or orientation to actually understand how the high school worked and they will always try to give support and information about anything that can help us. It also helped that the ESL classes back in my junior year were like every day ... so it was a better way to establish relationships with the teachers. On that level, I just always felt that if it wasn't because of those teachers and their support, I would probably have had a hard time and not enjoyed high school at all and I would spend most of my days just being stressed about life. (Regina)

On the other hand, Eleanor shared her circumstance of being too old (19 years old) to attend high school and having to take ESL classes at a community college. Eleanor shared the following, "My first language is Spanish, and I didn't have the chance to go to the high school because I was too old to go into high school. So, I went to [a community college] to learn English." Moreover, she discussed her concern of having an accent and how it can affect her teaching when she said,

I guess that's the main point, but as a Hispanic/ Latino future teacher, I will say that it would be hard at the beginning, you know, because I was an English Language Learner, and I guess I still am, and I still have an accent. (Eleanor)

Participants that attended ESL classes in K-12 classrooms shared having an easier time learning English due to the school structure and social aspect of the school environment. Yet, participants who came to the country as adults discussed having a harder time to learn since they attended classes occasionally. Many of them lived in places where they did not have access to full-time ESL classes for adults. The researcher noted that the older the participants were when they came to this country, the more they were concerned about having an accent.

Apart from the immigration and language status, 12 participants identified as being first-generation college students, a term that has been defined as students whose parents or guardians did not complete a college degree or students who are first in their family to pursue a postsecondary education (Gibbons et al., 2019). Participants explained their lack of knowledge or support from their family regarding attending college. Jacqueline acknowledged that other college students like her might come from families with children who are the first-generation to attend higher education, and how it can be a challenge. Jacqueline explained,

Also, for a lot of students like me when we come to college, we don't really understand the process of college. So, it becomes a lot more difficult to kind of navigate. Is this what I should be doing or is this what I shouldn't be doing? and to have parents who probably might not have gone to college makes it all more difficult because then we kind of have to figure that out on our own and use the guidance of our advisors for further assistance. (Jacqueline)

Participants who identified as first-generation college students shared the lack of support in their K-12 experiences and nine even noted that they did not have appropriate resources during college. Out of the 12 participants who identified as being first-generation college students, only three were part of support programs that specifically helped first-generation college students.

Many participants fall into more than one category regarding their educational, immigration, and language statuses. Two participants fall into all the categories listed in Table 7.

**Table 7**

***First-Generation College Student, Immigration, and Language Status for Participants***

Pseudonym	Immigrant Status	Parents are Immigrants	Undocumented Status	First-generation College Student	ESL Student
Alba		1		1	
Antonia		1			
Bae		1			
Daisy	1	1		1	1
Edith	1	1		1	1
Eleanor	1	1		1	1
Eva		1		1	
*Gabriel	1	1	1	1	1
Gabriela		1			
Jacqueline		1		1	
Julieta		1		1	
Kiara		1			
Maria		1			
Maribel		1			
Matias		1			
*Regina	1	1	1	1	1
Reina	1	1		1	1
Roberta	1	1		1	1
Sergio		1			
Sofia		1		1	
Total	7	20	2	12	7

*Note.* \*Participants who represented all the categories.

## Internal Obstacles

Participants described having different internal obstacles during college that affected their educational experiences. The internal obstacles shared had to do mostly with academic and personal difficulties. Academically, some participants shared having hurdles related to keeping up with their schoolwork, resulting in a decreased GPA. This outcome meant staying in college for an extra year to repeat courses or complete additional courses to improve their scholastic standing. Furthermore, one participant discussed the personal difficulty she had with learning a different world language and many study participants complained about their frustration of not knowing the procedure for becoming a teacher. Alba revealed her concern of being disenrolled from the program due to her low GPA when she explained,

Around that time, I began really struggling, keeping up with all the assignments, I started losing a lot of motivation in terms of having me stay in the program. Most of it came with the fact that I didn't have a 3.0 GPA, which is a requirement to stay within the program. I believe I was like a two point eight or two point nine, so I was right below it and I was told that if I didn't bring it up, I was going to get kicked out. Then, I took a linguistics class that I really struggled with, and the professor was really tough. There was one class that I just broke down and I started crying because I couldn't stay. I thought I couldn't make it. (Alba)

Jacqueline shared how she had to stay an extra year in college, stating, "OK, I'm a fourth-year student and I'm supposed to be graduating this year, but I wasn't. I stayed an extra year at Welby due to some academic issues." Eleanor, who transferred from a community college, acknowledged her frustration of not knowing much about the terminology being used in the

education program, such as edTPA which refers to Education Teacher Performance Assessment. She explained,

... I'm not super familiar with the whole education world. Like, I didn't know I needed to have edTPA, like, I don't know a lot of the terminology. I just found that I had to take a Praxis which I'm not familiar with. (Eleanor)

Participants also shared having personal difficulties such as dealing with ADHD, anxiety, self-criticism, self-doubt, and lack of confidence that influenced them in college. For instance, Alba continued to share that her struggles with her assignments were related to her being diagnosed with ADHD. She explained, "I had one professor who was very hands-on and really wanted to work with me [to help me focus on my class activities]. I always struggled a lot with my ADHD, so it was always a hard time for me to catch up with all my assignments." Julieta, Matias, Antonia, Edith, and Sofia disclosed having instances where they have criticized themselves, created doubt about their skills or did not participate in events or in the classroom due to a lack of confidence. Matias recounted a situation when one of his professors pushed him to audition for a band. He stated,

There were definitely a couple of times when I felt like I would like to doubt myself, or maybe I didn't have as much confidence in myself and he would have, like, helped me. For example, there was an audition for the jazz band or something. I was like, I've only been playing guitar for like a year and a half or something like, I don't know if I'm good enough, and he was like yeah, you should audition. Like, we don't have anyone else and like, what's the worst that can happen? (Matias)

Edith similarly described her discouragement when she thought that her lesson plan did not go as well as she would have liked, expressing,

I taught my very first lesson and it was my first time being in front of the classroom with students and, although there were some things that went well with the lessons there are also things that I realize that I need to work on. You never notice the little things about teaching until you are there. You could take as many classes, but nothing is the same as the actual experience and me being someone who is very hard on themselves it is a bit discouraging when things go left. (Edith)

### **Resilience**

Throughout the interviews, several participants discussed the different ways that they use resilience to succeed in their educational program and in life. Resilience can be understood as an individual's process and capacity to overcome adversity and succeed despite difficult circumstances (Ang et al., 2022; Portnoi & Kwong, 2019). In their personal lives, participants shared having to experience racism, being excluded due to their culture or ethnicity, having to adapt to a new environment and language, and not seeing other people who looked like them. When asked about experiences that have created doubt about pursuing a career in education, Daisy disclosed having a teacher who was a racist, as she explained, "Um, definitely a lot of racism. I think just in general, like my public school system where I grew up in, the math teacher was definitely racist towards the majority of the brown students." Additionally, Roberta shared her concern of being excluded due to your ethnicity, mentioning, "... and that also kind of intimidates you because you think that you're going to be excluded because of your like ethnicity. Sort of."

In the university setting, participants gave examples of resilience when filling out college documents, transferring to another institution, returning to school, working while also attending college, and playing a specific instrument. Participants described some of the situations and



techniques that they used to practice resilience. Ten of the participants shared having to work while attending college. Edith, Julieta, Antonia, Alba, and Sergio shared being able to work on campus as student workers. Sergio added that he worked on campus and off campus, explaining, “I work as a mentor and help her keep on track with things like homework. I also work at Chick-Fil-A, and I’ve worked there for, it will be three years in June.” Daisy described the pressure she felt being a musician since she was the only student to play clarinet in her major. She stated,

I am a sophomore music education major. I mainly play clarinet and I am one of the only clarinet players left at the university ... I definitely feel like a lot of pressure is kind of on me. Not because I have a big role, but because I’m kind of one of a kind for playing clarinet. (Daisy)

Having the ability to cope and maintain a positive mindset has helped some participants to continue being resilient. Bae shared how having another student with him helped him succeed at his job of assisting a band director at a high school. He explained,

So recently, starting last fall, I started teaching [assisting a band director], at a high school with one of my colleagues. We both teach marching band and percussion during the fall and in the winter, and it was a tough experience at first, but having another person was very helpful. (Bae)

Additionally, Eleanor talked about how having a positive mindset has helped her accomplish the tasks ahead, especially when teaching students. She expressed,

It depends on how you wake up every day, if you say that today is going to happen like this, it will happen. But if I say, OK, today, I took it as if I am a teacher. If I wake up with an idea like, oh, today the kids are going to be hard or today the kids are going to be annoying, that will happen. So, I’m like, no, I have to be positive. (Eleanor)

## **Theme Two: Education Career Motivators**

The second theme named Education Career Motivators reveals the several factors reported to have played a role for these students of color when they chose education as a career. Some of the factors include choosing teaching as a career based on personal values and skills as well as environmental events and past experiences. These factors agreed with several components of Krumboltz's (2011) research, with three sub-themes being identified: internal motivators, external motivators, and experience working with students. The internal motivators' sub-theme is defined by the personal values and skills of the preservice teachers, such as being passionate about a specific subject, e.g., music, language, mathematics, etc., and the desire to make an impact in this world. External motivators focused on participants having positive interactions with teachers in their schools and families. The last sub-theme referred to unpaid and paid activities where participants had the opportunity to work with children and/or adolescents prior to entering their teacher training program at Welby.

### **Internal Motivators**

Related to this sub-theme, participants shared how their passion for a subject, their desire to make the world a better place, and the importance of being a role model played a role when choosing teaching as a career. Participants expressed that they were able to share their passion for a particular subject matter through teaching. For example, Julieta specifically shared her involvement with music at church and how she knew music education was an option by sharing,

My parents also raised me, like in church, so I sang in church. I had piano lessons. I had voice lessons. So, it was always kind of in the back of my mind that like, oh, I probably could do music education. (Julieta)

Likewise, Matias and Bae saw the enjoyment that students had when working with music. Bae specifically recalled an experience of seeing students enjoy music when he assisted the band director during rehearsals. The delight and growth experienced by these students motivated him to become a teacher. He shared the following explanation.

I see them sharing music and learning music together not just within the rehearsals, but outside of them. That has just been very motivating to me as an educator because that's what got me into it in the first place. Just having that passion for music and wanting to share it, not just with, you know, my colleagues, but with my students too. (Bae)

On the other hand, Sergio shared his love for the subject of history, but decided to also add teaching as a major to be able to teach history to others. He noted,

Well, I mean, I've always loved history. So, you know, I kind of figured if I just majored in history alone. But that's kind of boring, because like, you know, there's not really much I can do with that, so then I felt like teaching, teaching would be cool because I would be able to share my love for history with everyone, with students, and help them discover why it's so interesting. (Sergio)

Similarly, Gabriela concluded that through teaching she can share her passion for English and working with children. She stated, "I have always enjoyed English class. I knew that I always wanted to work with children and so, I kind of just put two and two together and decided to become an English teacher."

Eleven participants shared the importance of making the world a better place by teaching students. Gabriel shared how teaching students goes beyond teaching them about a subject, and how teaching different skills to students, such as how to be a self-advocate can create a better world. Gabriel described his perceptions in this way,

I was in theater [productions] and [performances], and I really think there is a value in, you know, in teaching children about, you know, advocating for themselves, about public speaking, you know, proper ways to socialize, having a moral compass. (Gabriel)

Kiara added how in the classroom teachers can be preparing students for future careers that will make an impact in this world, not just academically, but economically as well. She noted,

You're not only benefiting yourself, but you're also helping society economically and academically, you're impacting so much ... you're going to have doctors, you're going to have attorneys, you're going to have someone that is going to make this world better. If you realize how much of an impact you have in the classroom, I think it's definitely rewarding. (Kiara)

Furthermore, Eleanor also shared her future goal of studying for a master's degree after she finishes her teaching degree to continue helping students. She noted, "I would like to get a master's degree [in speech pathology], after my bachelors [degree] to help some kids that are, you know, not able to speak or they have some problems speaking."

Four of the participants shared how they wanted to go into teaching because they wanted to be role models for future students. Sofia discussed how she worked at a summer camp, and she enjoyed being a role model. She shared, "I had experience of being like a role model, like in summer camps and stuff. So, I thought, why not keep it going on because I really enjoy it."

Moreover, Reina talked about the importance of being able to represent the culture and background of many students in a school and classroom. Reina acknowledged the following,

In order to help the students of color and you know, you can make a difference in this field, not just because of the skin color also, but the experience that we bring from our

cultures, especially here, that the cultures are so intertwined. But children need to identify, well, more and more and be represented. (Reina)

### **External Motivators**

Participants shared three primary external motivators which included: family members who were teachers, previous teachers, and job availability. Stories from the participants agreed with Castañeda (2014) who included that family members who are teachers and previous teachers play significant roles in the selection of teaching as a career. When asked about their choice of a career in education, many participants in this study answered with stories regarding family members who had been teachers, and inspiring teachers in their school journeys. Four participants acknowledged having either a parent, grandma, aunt, and/or an uncle who was a teacher. Alba described that her mom was a teacher. The classroom stories related by her mom helped her to understand how her mom prepared lessons and related to students. She shared, “I used to watch her interact with the kids during the summers ... I was always with her.” Moreover, Gabriel shared how his grandma and uncle are teachers. He disclosed his connection to understanding the activities related to teaching, “Really, just the fact that, you know, my uncle is a teacher, and my grandma is a piano teacher and a vocalist.”

Apart from having family members who are educators, 13 participants shared being influenced to go into this profession by their interactions with and observations of teachers they knew from previous classes. A few of them were encouraged by a previous teacher to become an educator. The participants shared how their previous teachers saw the passion they had for a subject or the qualities they demonstrated for being a teacher. For example, Antonia recalled being told by a teacher to join the field because she was good at English when she said, “I’ve always loved English and I’ve always been good at it, so one of my high school teachers said,

you should continue this and become a teacher or author.” For other participants, just the fact of seeing their previous teachers’ interactions in their classrooms was enough to feel inspired to follow this profession. When asked how he became interested in teaching as a career, Matias acknowledged how his music teacher, who was also the band director at his high school, inspired him to be a teacher. He expressed,

I guess I would say the teachers I had in middle school and high school. My high school music teacher who was the band director actually passed away, unfortunately, but his name was Mr. C ... just seeing him like every day, you know, the dedication he had for his students, his passion, you know, his commitment even had like an after-school band program, you know, which I’m sure wasn’t like necessary for him to do, but he wanted to do ... So, he was one of my main inspirations, I would say. (Matias)

Eva shared a similar story of inspiration by her Italian teacher by saying, “My Italian high school teacher, she was just like, very kind, like had such a positive energy ... like she actually cared about everybody. So, she really motivated me, inspired me into wanting to become a teacher.”

Three participants shared that another external motivator influencing their education career decision was seeking a field that has available job opportunities. Maribel, one of the participants who shared switching to education from another college major, discussed her likelihood of getting a job after graduation due to the shortage of teachers. She said, “I kind of got the idea to go into teaching because first of all, I think, on a fiscal level, there’s a huge teacher drought right now. So, you know, the chances of me being hired are pretty high.”

### **Experience Working with Students**

All of the participants shared having experiences working with students while in high school and/or college that affected or reinforced their decision to become a certified teacher.

Experiences working with students during high school included: tutoring ESL students, babysitting, community service, helping at summer camps, and participating in programs to learn about teaching by working with students.

Daisy and Gabriela discussed the opportunity of tutoring other students who did not speak English. Daisy mainly helped her classmates who were new to the country while Gabriela took a child development class where she had children who spoke Portuguese. Gabriela added that this experience motivated her to earn a TESOL certification to continue working with ESL students. Gabriela explained,

I worked with children that spoke Portuguese and I was able to help them out ... it was definitely ... gratifying and solidified that I wanted to be in the education system and potentially get a TESOL certification after I graduate so that I can be an ESL teacher.

(Gabriela)

Eleanor and Kiara also recalled enjoying babysitting and how they enjoyed working with children. Eleanor was mainly the babysitter for her younger siblings and cousins, while Kiara used to work for a family in her neighborhood. Kiara noted, “I also just loved babysitting and just any job that had to do with kids. So, teaching fits right in there perfectly with that.”

Additionally, eight of the participants shared contributing to community service activities during high school to help them see if teaching was a viable career option. For example, Sofia explained, “I just love that I’ve taught at a summer camp over the summer, and then before I taught at it, I was a volunteer, so I already knew the kids.” Likewise, Maria volunteered at an elementary school, and enjoyed seeing the work of the teachers, she shared “the more I volunteered, I was like, yeah, this is what I want to do.”

Four participants included participating in a college program during the summer before their junior or senior year to learn about teaching by interacting with students. Edith, Regina, Jacqueline, and Alba had attended the same local high school where they participated in a series of classes called Grow Your Own Program (GYOP) that helped them explore teaching as a career. They shared how this experience helped to reinforce their idea of going into teaching. Jacqueline described the program by expressing the following,

The ... program offered a teaching pipeline where you would have the opportunity to basically take kind of like an intro course to education. You also had the opportunity to go to one of the local elementary schools and do a couple of hours of observing for a little bit and mostly teaching the students that were in that classroom. They were elementary school students and that interested me as well after I took the course, and then, I just decided to pursue a career in teaching once I got to college. (Jacqueline)

At the college level, most experiences working with children were paid positions since 15 participants needed to work while in college. They preferred being employed in a job that they were enthusiastic about. These experiences included being assistant teachers, paraeducators, substitute teachers, daycare personnel, and summer camp counselors. Maria recalled enjoying her experience as a substitute teacher working with students and teachers. She shared, "I feel like for me ... substituting gave me ... a lot more experience because ... I could see the students, and how the teachers felt." Similarly, Antonia shared her experience being an assistant teacher at her local YMCA. She stated, "I work at the YMCA as a part time assistant teacher and I volunteer at my elementary school, so I have ... a lot of experience with kids."



### **Theme Three: Education Program Pros**

The third theme identified as Education Program Pros acknowledges participants' perceptions regarding the faculty members and structure of Welby's education program. For this theme, three sub-themes emerged: positive pre-service program culture, satisfaction with the program structure, and positive field experiences. The positive pre-service education program culture describes participants' experiences regarding interactions with faculty and their cohort members. The concept of program structure satisfaction focuses on professional opportunities that the participants had throughout the program. The last sub-theme of positive field experiences entails participants' experiences going into schools to teach students and observe teachers.

#### **Positive Education Program Culture**

Participants acknowledged building cohort connections, receiving support from faculty members, and having faculty members serve as mentors, which created a positive culture for them. Studies have provided evidence that both negative and positive interactions experienced by students of color with their peers and faculty can play an important role in their college career (Bell & Busey, 2021; Plachowski, 2019; Scott, 2018; Trent et al., 2021). When discussing cohort connections, participants described building connections with their cohort members during class as well as outside of class. Currently, the education program offers classes where elementary pre-service teachers and secondary pre-service teachers are together in several courses. Furthermore, participants in secondary education complete classes within the education department and in their academic major. For example, for music majors, pre-service teachers have classes within both the music and the education departments at Welby. Bae added the importance of having classes with people who had a different academic major by expressing, "In my music classes, some students might not even know what their education majors are doing, but in our education

classes, I think it's valuable and worthwhile to hear and see what other education majors are doing." Additionally, participants like Kiara shared having a positive culture by being able to rely on the other cohort members when she shared,

I really like the people that I've met, and I've gotten to know them really well. And so now it's like everyone that you see in your classes has pretty much been in your classes throughout your whole experience ... I have gotten to be pretty close friends with everybody, and it's a very good, supportive community. I feel like I can reach out to pretty much anybody and somebody will be there to help or answer my questions or at least guide me in the right direction. (Kiara)

Five of the participants shared spending time with their cohort members outside of the classroom. For example, Antonia shared having a group chat and getting together with her education friends for study groups or just to hang out. She discussed,

Mostly, the support and like just the friendship of all my colleagues, because when it comes down to it, every time we are all struggling with something when it comes to the department, like whether we're confused on due dates for things or whether we're confused on like actual protocols for things we can always you know reach out to each other. Like, I actually have a group chat with a decent amount of my education buddies. Some of us also get together after class or weekends to do study groups or just to hang out. So, yeah, I don't know. I just like the friendship of it, I suppose, like I've made friends with almost all of them. (Antonia)

Aside from building connections with their cohort members, participants also described moments when they felt inspired, supported, and/or mentored by a faculty member. Eva and Gabriel acknowledged having a positive relationship with the same education professor who was

also their advisor. They described this professor as being very sweet, a great teacher, amazing advisor, and a caring person. Eva added, “Dr. X, I don’t know if you know her. Well, she’s an amazing advisor. Like she really motivates me as well, like she’s very positive, especially when she teaches. She also inspired me to keep pursuing education.” Similarly, Matias shared his connection to another professor, stating, “I would definitely have to say, like the teachers. Last semester, I took [name of course] with Dr. ... Yes, she’s a really sweet teacher. She’s a great teacher. I have learned not just content, but life lessons from her.”

In other instances, few of the participants also stated enjoying when the professors shared their own experiences and backgrounds. For example, Julieta disclosed enjoying learning about her professors. She mentioned,

Honestly, I like learning about my professors. I like the people that I’ve met and their experiences and the more that I learn from them has been, like a lot. Like, I’ve grown a lot because of the people around and the people in the department. So, their experiences with music and their backgrounds also kind of helped me learn and grow. (Julieta)

Likewise, Regina talked about one of her professors who described his experience when he was a teacher. She disclosed,

Actually, one of my professors said that when he was a teacher, not only did he [have] to prepare lesson plans, but also grade all the assessments and homework. He also had to attend the thousands of meetings like they have to attend team meetings, meetings with administrators, and obviously the parents and teacher conferences. Aside from that, there’s a lot of work that he had to do. They have to do some reports and things like that.

(Regina)

It was quite “eye-opening” for Regina to learn the extent of activities included in the teaching profession.

### **Program Satisfaction**

In addition to being satisfied with their cohort and their connections with faculty members, participants expressed their satisfaction with the course content/practices and other professional opportunities that they had by being part of the education program. Studies regarding classroom practices with an array of curriculum and academic support can help students of color feel visible and increase their sense of belonging to the college campus and/or the teaching community (Archer et al., 2022; James et al., 2020; Lefty & Fraser, 2020). Jacqueline noted how the course readings made her think about herself and how her background and knowledge will help in the future. She stated,

I found the lectures very interesting and the conversations in the books that we would read. It was very intriguing and made you kind of just learn more about what you were doing and why it was that you were becoming a teacher, what difference you were going to make, what to do, what not to do. During the classroom discussions, I also like learning from the other students. Like, we all come from different backgrounds and have different opinions. (Jacqueline)

Participants also shared about classroom practices that encouraged them to work together and learn about resources that they can use in the future. Eva shared an instance when the professor asked the students to work together. At first, she was not happy about that since she had to find time outside of class to work with the classmate; yet she learned that doing this was helpful as she will need to collaborate with other teachers in the future. She said,

There was definitely a moment where a professor assigned us to work in groups and it wasn't necessarily inside of class time ... And it took a lot of back and forth and communicating all like, you know, like, I think that this would be more effective for this reason ... but that was probably the most difficult having to work with students ... having differing ideas ... But also, that kind of lets you know what you're going to do once you become a teacher ... you're probably going to work with colleagues ... coming up with different things inside of your classroom or at your school or like in terms of events that should be hosted or just things for your department ... (Eva)

Sofia described the importance of professors both teaching current content and providing opportunities for students to lead classroom discussions. She shared,

I have a professor; she teaches what's called to be very up to date. And involves us in many, um, like the activities we do online, like for homework and stuff. I think it's really eye-opening. And for people who are people of color, I think it's a great benefit to have these types of lessons online and learn about bias or subconscious bias, because that's mainly what we're learning right now. So, I really enjoy the class. I think it's fun. And she lets us talk about different things and lets us lead some discussions. (Sofia)

During the interviews, participants also acknowledged the different opportunities that they received because they were in the education program. These opportunities included attending professional conferences, working on campus as mentors, and obtaining a job right after college. Julieta described having the opportunity to attend two conferences by saying,

So, there's the Connecticut Music Educators Association. They have a conference in the spring, and that was one of the biggest. It was that and there's also the American Choral Directors Association. So those two conferences that I went to, they were kind of like a

big reminder, a big refresher of what it means to be a music educator, you know, because we have the conferences, and they all have student performances. So, we get to see a concert of, you know, people who audition from different regions to get into the conference for the performance. (Julieta)

Participants also addressed working on campus as a peer-mentor or tutor. Edith, Gabriel, Jacqueline, Julieta, and Sergio, for example, shared that they worked as peer-mentors for other undergraduate students. Jacqueline remembered getting an email advertising the position. She shared, “Oh yeah, I think somebody emailed me and said, oh, like because of your education major, your grades, and because of your academics, we would like you to apply for this position to be a peer mentor.” Alba and Gabriela remembered getting similar emails asking them to apply to be a tutor. Gabriela shared that being an English major in the Secondary Education program helped her obtain a job at the Writing Center. She said, “I work at [the] writing center and used to work at the tutoring center. I think resources like that are very helpful with people of all majors, ... I am happy that I get to help other students.”

As an indicator of being satisfied with the program, four students shared being confident that they will find jobs because they feel prepared for a career in education once they graduate from Welby’s certification program. Bae described his satisfaction with the program by saying, “I wanted to come to Welby because I heard the music education program was really diverse and ... a high percentage of the students ... [find] work in the East Coast area.” Moreover, Roberta shared getting positive feedback from alumni. She stated,

I feel like this school especially has one of the best education programs. You know, there’s a lot of alumni that become teachers and not only this district, but there’s a lot of teachers in my hometown that graduated from here. And I’ve heard a lot of great things

from this school that has a really great education program, and they prepare students really well and it's not easy. (Roberta)

### **Positive Field Experiences**

Field placements, also known as practicum, or field experiences, are a requirement in teacher preparation programs where preservice teachers participate in activities such as classroom observation or fieldwork via a student teaching assignment to expose them to the classroom under the supervision of a certified teacher (Rodriguez-Mojica et al., 2020). When asked about what motivates them to stay in the education program or what they have enjoyed most about the education program, 14 of the participants spoke about teaching/observing students and learning from current teachers during their field experiences or field placements such as student teaching.

Participants shared being able to participate in field experiences as soon as their freshman year. Gabriel shared, "I would say I enjoyed the field work. I enjoyed that. You know, they put you in the classroom, you know, kind of right away almost as soon as you start the program." Many of the earlier field experiences included pre-service teachers taking courses that needed them to observe K-12 classrooms for at least 20 hours. Sergio described his enjoyment of getting to observe classes back at his old high school by mentioning,

I really like the observation hours that I had to do. Were really, really fun because I got to shadow a teacher at ... and that's where I went. So, I thought it was really cool to be back in there with a different frame of mind and see how lessons are [run] and ... how to deal with ... disruptive students. (Sergio)

During each of four courses related to learning about teaching methodologies, three participants shared being able to practice skills by using mixed-reality simulations. Roberta shared, "I like the

preparation that they make us do in the classrooms, like there's a simulation that we do with students and like the parents ... I feel like that gets you prepared more.”

Moreover, at the schools, Regina shared having the opportunity to see both middle school and high school classrooms. She described,

Last semester, I was doing the Professional Development Assignments (PDAs). That's usually the role of the senior year in an education major. We had to go to the middle schools and high schools. I went to the high school for two weeks, but I went to the middle school throughout the entire time that we had to be there... even though it was one of the hardest semesters. It was what I love the most because we actually had one-on-one interactions [in] the classrooms, with the kids, with the teacher. (Regina)

When the interviews took place, six participants were engaged in their student teaching experience. Four of them detailed their positive experiences. Eva acknowledged the benefits of having a student teaching component. She stated,

The student teaching is also really good just because it gives you a full-on experience of what you're actually going to be doing, but it is like, I'm like actually doing it, I like teaching my lessons now. I just had an observation today ... So, it's definitely enjoyable ... (Eva)

Similarly, Edith mentioned being hard on herself the first time she was teaching and how her lessons improved the more she did them. She described,

So, like I said, I am currently student teaching. On Wednesday, I taught my very first lesson and it was my first-time teaching ... although there were some things that went well with the lessons there are also things that I realize that I need to work on. You never notice the little things about teaching until you are actually there. You could take as many



classes, but nothing is the same as the actual experience and me being someone who is very hard on themselves it is a bit discouraging when things go left. However, the next time teaching, I did implement some changes, and it went slightly better. (Edith)

#### **Theme Four: Career Deterrents for an Education Major**

The fourth theme titled Career Deterrents for an Education Major describes what these participants thought were the biggest roadblocks to individuals of color choosing teaching as a career. This theme included four sub-themes: controversy due to social/cultural issues, high school preparation issues, college access and preparation issues, and teacher working environments. The sub-theme concerning sociocultural issues describes the experiences of students of color regarding a lack of representation, cultural biases, and social perceptions about teaching as a career. The next sub-theme of high school preparation issues reveals lack of guidance and exposure for students of color to explore teaching. The sub-theme of college access and preparation issues refers to challenges students of color have during college as they progress to a certification as a teacher. Lastly, teacher working environments sheds light on the participants' perspectives about the varied—and often inequitable—working environments of teachers.

#### **Social/Cultural Issues in Education**

Several participants recollected seeing a lack of teachers of color, male teachers, and diversity in curriculum. These concerns were reported as deterrents to a career in education. To explain the lack of ethnic/racial representation, participants said, “It’s just so rare to see someone like yourself” (Roberta), “I don’t think I ever had a teacher that was Hispanic or a teacher that was Black” (Eva), “I mean, I don’t know, they were mostly White teachers” (Jacqueline), and “I just don’t think there’s a lot of opportunities for teachers of color” (Daisy). Adding to these

statements, some of the participants expressed feelings of concern as to why there is a lack of representation. For example, Roberta shared, “I don’t know. I mean, I guess not seeing, you know, people of color as teachers’ kind of frightens me. I mean, why isn’t there enough people already? Like, what problem is there that’s causing this?” Furthermore, through her experience as a substitute teacher, Antonia had observed a general lack of connection between a white teachers and students of color. She stated,

It just felt weird because you could tell the students who are of color, they didn’t have as much of a bonding or a connection with their teacher because they don’t have that person there that they can relate to. You don’t look like me. I don’t look like you. I don’t need to listen to you. (Antonia)

Aside from the ethnic/racial lack of representation, three participants mentioned the lack of gender representation of teachers in the schools. Alba shared her experience with seeing mostly female teachers growing up. She stated, “Growing up ... I didn’t see a lot of [diversity represented by] teachers ... Most of them were just women. When I got to high school, I got to see the difference of men and women.” Furthermore, Eva shared her feelings concerning prejudice towards male teachers and specifically those of color. She disclosed,

I feel like it’s even worse for males ... despite racial profiling. [I] think in general; they get prejudiced as well because a decent number of schools, they mainly have female teachers and mostly white female teachers. So, I feel like there’s definitely some issues going on there ... either the district or higher ups of the education department or the parents don’t feel comfortable with either a male individual being a teacher. Then on top of that, there’s a person of color being a teacher, and it’s just awful. People are really racist, and it makes me mad. (Eva)

For many participants there was also an issue of having a lack of diversity in curriculum. Daisy shared how the lack of learning about ethnic culture can affect the hiring of diverse staff by saying “They only stick to [or teach about] Americans and the White side [everything] versus like what actually happened from a bystander versus someone on one side, this mentally affects how teachers are being hired ....” Regarding diverse concepts, Julieta shared how she thinks Jazz should be taught in her classes due to its historical background. She said,

We don’t talk about jazz as music education majors and I know jazz comes from a historical background of people of color, and I think that’s really important. So especially like people who are my friends who are in jazz studies, they talk a lot about that and as music education majors, the professors don’t really talk about that or they kind of like, shame it. (Julieta)

Adding to the lack of a diverse curriculum, Kiara shared her concern with diversity reflected in books and social topics in general being banned in different states in the country which can exacerbate the lack of representation. She shared,

I mean the policies about books and other things on the whole curriculum getting thrown out ... like they don’t even want to talk about critical race theory anymore, which is ridiculous to me. Like, every time I think of [a state in the southern region], I’m like, the majority of the population [is] Hispanic. So why would you not want to talk about critical race theory? Like Hispanic culture is related to critical race theory. (Kiara)

Another sociocultural issue that participants shared regarding education was society’s perception on teaching as a career. Some of the participants shared encountering conversations from family members or other people regarding negative opinions on teaching as a career. Comments like, “I don’t think teaching is really that high up on ... the ... dream career list”

(Sergio), “like there’s kind of like a little bit of a stigma against teachers” (Kiara), “there is no respect for the teachers” (Eleanor), “like teachers ... they also have to be like a parent in the classroom” (Maria), and “ shouldn’t be a teacher because first the salary, now the parents, and the third one can be the kids” (Edith) created doubt in the minds of these participants to continue to pursue teaching. Additionally, participants shared that the career of teaching is attacked in social media. Teaching is also in competition with other careers that offer higher salaries.

### **High School Preparation Issues**

Participants explained that when they were introduced to potential careers in their high schools there was a lack of information and guidance about education as a possible occupation. This was particularly true for students of color and may be a reason they do not pursue careers in education. Nine of the 12 students who identified as being first-generation college attendees recalled instances about being unaware of the different levels of high school courses, such as Advanced Placement (AP) and honors courses. They also reported that they were not informed of the requirements to take certain classes, such as peer-leadership and child development, which would have helped them make informed and early decisions about teaching as a career sooner than they ultimately did. Sofia being a first-generation college student expressed being lost in high school by saying,

I remember that when I got to high school, I barely knew the difference between honors classes, AP classes, I didn’t even know they existed. I didn’t even know that I had to meet some requirements for graduation. It was just like, oh, they give you the classes and then you graduate after four years. (Sofia)

Regina, another first-generation college student, also talked about how her parents were also lost with the process even if they wanted to help. She stated,

It was hard to find support within my high school, especially with my family, even if my parents wanted to give me all the support ... they couldn't because they weren't informed. They didn't know how the education system worked here. (Regina)

On the other hand, Kiara talked about having college counselors with heavy caseloads who could not meet with every student. Bae shared that in his high school a music course was not available to every student. Reina noted how there is a need for proper advising to help students decide which career to take. She stated, "I think you need counselors and advisers to be able to help you navigate through careers and determine whether this is a proper option for you. I definitely think there is a need for right academic advising." Lastly, Edith shared how she thinks "there's a shortage of students of color pursuing a career in education because a lot of students of color are not aware that it is an option for them."

### **College Access and Preparation Issues**

To become a certified teacher, a college degree is required. Nevertheless, participants shared that their concerns of poor access and preparation for a college education specifically in education were followed by challenges as education majors once in Welby's pre-service program. These two concerns were seen as career deterrents for students of color who wanted to pursue a career as a teacher. Regarding the access to college, items such as the need for a college degree, the cost of college, and lack of knowledge and/or support in financial aid resources were brought up. Antonia shared that some students of color might not see college as a necessity, by mentioning, "I think the overall consensus is that college is more or less useless unless you're going for a STEM degree or ... a law degree." Similarly, Eva shared the hesitation of some Latino students with immigrant parents like herself, to pursue college for four years by sharing,

Being a Latino born to immigrant parents it's always been well you have to work after school and college is another additional four years that you have to keep studying and you would not be able to work a full-time job as other people, and it's more I feel like the necessity of financial reasons that students of color might not be inclined to continue their education. (Eva)

Furthermore, six participants shared that college might not be affordable to everyone. Related to this topic, Jacqueline noted, "I mean, just having access to affordable education, maybe not all minorities are able to have access. So, it makes it more difficult to want to pursue a career in teaching or in any other career for that matter." Additionally, Gabriel shared, "What I hear from a lot of people is that college is expensive, unless you know, you did well in high school, you have scholarships or grants."

Even though there might be scholarships and other funding resources, participants shared that there is a lack of knowledge regarding scholarships, and the processes to get federal financial aid might be complicated. Matias and Regina, who were first-generation college students, mentioned how difficult it was to fill out the Free Application for Federal Student Aid (FAFSA), a resource to be able to get money for college. On the other hand, only Daisy and Jacqueline mentioned receiving a scholarship that was specific for minority students. Regarding access to such scholarships, Bae shared, "I know some people have gotten scholarships and funds you know ... but not sure if those are for everyone."

Five of the participants describe the need for financial support to also cover or supplement additional expenses specific to students enrolled in the education program. Eva noted, "I remember during my education classes, there were some things that we had to pay for in order to be a teacher ... we had to pay for live text and some textbooks." Additionally, two of

the five participants specifically mentioned not being able to get paid or work during the student teaching semester. Eleanor stated, “I think we should get kind of like a salary, like not a lot, but at least something to survive with ... because we don’t get paid anything and that’s kind of like a pain in our shoulders.”

Apart from the financial aspects of college, participants noted some hesitations regarding the structure of the education department. Some of these hesitations included not having diversity within the various content area departments, lack of knowledge regarding academic support, not having adequate preparation for field experiences, not having a flexible schedule, and lack of training for new faculty and staff. These challenges have caused frustration for the students and even doubts about whether or not to continue with a major leading to a certificate in education. Regarding the lack of diversity, Roberta mentioned, “There isn’t really much diversity among the professors and the staff in the education program. So, I guess that could also be frightening to some people of color.” Likewise, Edith added a lack of diversity within the students by saying, “You never really feel like a student of color until you’re in a classroom and you’re the only person there, which is definitely, you know, the only person of color in a classroom.” Furthermore, seven students describe that there is a lack of diverse issues being discussed in the classrooms. Julieta shared her feelings towards this lack of diversity by saying, “I feel like they should give more opportunities to students of color ... I feel like classes need to integrate a lot of different cultures from different backgrounds in the curriculum.” Similarly, Antonia recommended “having more conversations on the racial issues that are occurring.”

Four participants also shared the lack of knowledge regarding academic support. Regina shared, for example,

I am a secondary math education major. This is technically my senior year ... but I still have to go through another year to get my degree ... In freshman year, I didn't do good in a math class which brought down my GPA. (Regina)

When asked about if she sought out for tutoring or academic help, she mentioned how she was unaware at that time. Moreover, Maria brought up that math classes for education majors are different from general math classes. She stated,

I would like a math tutor for the education program because we take different math. I've been to the tutor for math and they're like, oh, I could not help you ... because they're not an education person. They just know general math. (Maria)

On the other hand, Sofia shared that there is a peer mentor program, but only some people were contacted about it, stating, "If I had known that this resource was available, I definitely would have, you know, reached out, and I definitely would have looked for someone to help me."

Two participants shared having a hard time during their field experiences because they felt a lack of preparation. Maria, who is a junior, described her frustration by saying,

This past year, I feel like they don't completely prepare you for what you're getting into. Like, we do observations ... like one hour or two hours, but I feel like they don't completely prepare you enough to actually be out in the field ... this semester, as soon as we came back, we had to start teaching lessons and there was no structure. (Maria)

Moreover, Gabriel added not having the training to support all the students. He stated, "I had a student that had behavior issues and I didn't know how to handle him in the class. So, there was a paraprofessional in the room, and she was like, you should do this ..." Pre-service teacher candidates need to know how to work with the paraprofessionals in a classroom.



Participants further shared worries regarding the scheduling of classes, and the workload in the education department. Participants like Eleanor shared that they have multiple roles. Eleanor said, “I am a student, I am a wife, and I am an employee.” Having other roles apart from being a student, brought up concerns regarding the scheduling of classes. Participants shared, “The class schedule is not accommodating for me” (Edith), “education majors have like classes spread out like every day by different schedules” (Eleanor), “I have classes now, but after three hours, I have other classes” (Roberta), “I don’t think there is anything like they need to change besides the class schedule” (Kiara), and “ we have a lot of different classes” (Bae). Apart from when the classes took place, five participants brought up the workload issues in the program. Participants shared having classes apart from just student teaching. For instance, Eva shared, “it’s just a lot because we also have classes aside from the student teaching. So, it’s a lot ... and that’s why I’m like, yeah, I don’t know if I can do this.” Similarly, Bae who is taking classes in both the music department and education departments noted,

The schedule is loaded. It is a lot of time to be putting into it and I think what fills me with doubts sometimes is like, will I be able to have time for myself, not just for personal commitments, but for my own growth as a musician. (Bae)

Lastly, eight participants mentioned their frustration with the changes of the education department and lack of training for the new faculty and staff. Edith explained the situation of the department by saying, “there are issues within the department, which there have been a few over the last few years of professors leaving and then having to find replacements. So, things have been delayed and there’s miscommunications.” Maribel shared her frustration with this situation by stating,

Class-wise, the education department at Welby, has experienced a lot of changes within the recent years, administration wise. Being as we are one of the first cohorts that these new staff are helping, it could be frustrating just because we are all learning together.

(Maribel)

Furthermore, Kiara mentioned the lack of knowledge from the staff regarding education program systems. She shared,

Last semester, it was a mess for everyone in their professional development semester.

Most of the concentration teachers weren't aware of the certification process ... a lot of the teachers didn't even know what an edTPA was, they didn't know how to fill it out ...

The only person that was knowledgeable of that process in the program was probably just an advisor in the math concentration. (Kiara)

### **Teacher Working Environments**

Participants noted their concerns regarding the working conditions for current teachers as career deterrents. Differences in funding and diversity between school districts, the lack of classroom space, the relatively low pay, school safety concerns, and the COVID-19 aftermath represent the most frequently mentioned conditions. Participants addressed, for instance, how teachers of color tend to work in underfunded school districts. Alba shared, "we don't see a lot of teachers like us within the schools unless they are in low-income areas." Additionally, participants shared how there is a funding difference between some of the predominately White and more affluent school districts compared to predominately low-income school districts. Maribel shared specific differences between some school districts in the state where the study took place. She noted the following,

I know a lot of states have certain towns and cities that are pretty separate. If we just look at [state where the study took place]. You look at areas like [name of district] or [name of district], which [have a lot more student diversity] and they have like all the crime rates and everything. Then, you compare that to areas like [name of district] or [name of district], which is like a rich White area, you know? So, I feel like it kind of just depends on the area a lot. (Maribel)

Gabriel added what can be a result of some districts having more funding than others. He stated, Especially in more supported towns that have a lot more funding. They won't need new teachers if they already have the funds to be able to keep the teachers they have right now. Low funded schools, they probably are getting rid of teachers because of lack of funds. So, it's just a never-ending cycle due to our funding. (Gabriel)

Continuing with the lack of funding, Matias mentioned observing a teacher who did not have their own classroom. He shared, "she was like teaching music on a cart. She had a cart with all of her stuff that she would like to roll around the school because they didn't give her a classroom." The lack of funding in some districts also brought up concerns about salary. Participants mentioned sentiments like "teaching is a career that might not be so financially secure" (Kiara), "teaching is important, you know, so it should pay amicably" (Gabriel), and "there is a lot of work for low pay." (Alba)

Other concerns regarding the teaching conditions were school safety and the COVID-19 aftermath. Three participants mentioned being worried about school shootings that they hear in the news or through social media. Regarding school shootings statistics, Roberta noted the following, "I even came across at least three Tik Toks last night speaking about ... how we've only been 100 days in school ... and yet there's been 132 school shootings." Further regarding

the COVID-19 aftermath, six participants shared the lack of academic and social skills that the students are dealing with as creating additional burdens on the teachers.

### **Theme Five: Ideas to Recruit and Retain Pre-service Teachers of Color**

The last theme identified as Ideas to Recruit and Retain Pre-service Teachers of Color offers suggestions from the participants regarding what the university and program leaders can do to increase enrollment and retention of pre-service teachers of color. This theme included two sub-themes: marketing and promotion and programmatic strategies. The sub-theme of marketing and promotion describes the need to let potential applicants know of the resources, programs, and positive reputation that the education program has. The sub-theme of programmatic strategies suggests the different ways that program leaders can make sure pre-service teachers of color feel like they belong and want to continue in the program.

#### **Marketing and Promotion**

Participants strongly recommended promoting the department and the university to high school students, creating workshops specific for parents, promoting classes or programs at the college related to teaching, and highlighting the academic resources offered. Four of the participants recommended starting to market and promote the education program to high school students. Maribel, for instance, recommended, “recruiters can go to like ... a teaching club at my high school.” She also shared how those recruiters can talk about how Welby also has an education club and how students involved in a teaching club at the high school might want to join similar clubs at the university.

Additionally, Jacqueline noted that “if you are in the education club, [you] can go to those meetings, can learn more about the major, and interact with students.” Edith also shared that “more recruiters can go to the high schools, not only to sit around a table in the cafeteria ...

but to maybe do an info session during classes to reach more of these students.” Apart from admissions officers, which many of the participants referred to as recruiters, Matias recommended having “current students of color that are pursuing a career in education ... speak to some high school seniors or some students who are on the fence about whether or not to go into the education field.”

Three participants also shared the importance of marketing and promoting the program with specific people at the high schools such as counselors, band directors, and other staff who work directly with the students. Bae recalled, “we would get a lot of visits from like [name of college] just because they had a connection to our band instructor. I feel like Welby can do the same.” Additionally, Maria talked about how she wanted to attend a school in California or Florida and how her guidance counselor nevertheless recommended Welby since it was closer to her house and affordable.

Two participants believed there should be specific recruiting events for parents. As Edith noted,

If they were to have recruiters at like parent teacher conferences ... we would speak to parents. Personally, I feel like that would be helpful because when parents are aware of the types of opportunities that [their] children have; I feel like that can also impact the students. (Edith)

Matias, who has parents who are immigrants, also shared that having workshops with parents and students about college can “help them understand the college application process, how they can apply for aid and scholarships. I think that’s a great way to get more students.”

Seven participants talked about promoting classes or programs that high school students and/or current students can be part of to explore teaching as a career. Jacqueline stated, “Welby

could share the [name of program] where you kind of get to experience [teaching] while you're still in high school to make sure it's a career that you would actually want to pursue once you get to college." Additionally, Daisy discussed how it could be mandatory for students who do not have a major to take at least one education class. She said that this can help students be "brought up into the teaching environment to see if that's something that they would enjoy in the future."

Ten participants talked about the benefits of Welby and the education program specifically having academic and financial incentives as well as other opportunities for the students. Yet, the other half of the participants expressed being unaware of them. Therefore, participants like Sergio suggested that attention be given to finding ways to better market and promote the resources available to students of color at Welby:

I personally think Welby has great resources. If you're like a secondary education English teacher ... and you're decent at writing papers, but you could be a bit better. Like, there's the writing center, and there's the tutoring center, but not many people might know about them. (Sergio)

Adding to this sentiment, Julieta noted,

The biggest thing for me is just promoting the resources they have on campus because a lot of the students, even ... me as an RA ... don't know about the resources, and we have to do programs ... that could probably get them to ... look out for the resources. (Julieta)

Finally, Regina talked about not assuming that just because they are already students in the program, that they already know all the opportunities that are available.

## Programmatic Strategies

Participants offered different suggestions regarding strategies that the university and education program leaders can take to make sure students of color are retained. These strategies included: acknowledging the minority students on campus, hiring more diverse faculty members and staff, requiring a diversity course, and continuing to find ways to reduce the college financial burden. Three participants mentioned the need for some kind of acknowledgement for students of color. Gabriela talked, for example, about how there is a shortage of teachers of color and how there should be things done to acknowledge the barriers that students of color are going through to become teachers. She remarked, “maybe it could be like a seminar ... or a ceremony ... or a gathering for everyone who is of color to come together to shed some light.” Maria and Alba mentioned that it would be nice for professors to check in with them to make sure they are doing alright. Maria said, “I guess professors could ask if we feel like we belong here, like if we ever feel left out.”

Furthermore, five participants shared the need to hire more diverse faculty members and staff who can maybe relate to them. Eva noted, “Well, I feel like they should probably have more professors that are of color or like Hispanic ... I think no one in the department is Hispanic.” Kiara shared how hiring more professors of color can show how the education department can be “very open and very accepting of everybody ... because I feel like a lot of students would be uncomfortable to go to a school where there’s nobody that looks like them.” Additionally, two participants recommended making a requirement for students to take a diversity class. Sofia said, “Maybe as a prerequisite ... it [is] recommended for students ... to take [name of courses] where students have to learn about the types of people of color ... and the actual struggles that students of color face.”

The last suggestion that participants shared to retain students of color was to continue finding ways to reduce the college financial burden. Maria brings up the idea to help more students to apply to be substitutes so they get pay and meet the requirement of the field experiences. She shared how sometimes students might not take the “extra step to do the research ... the application ... the training.” Six participants shared the need for more scholarships available to everyone. Jacqueline recalled how she received a scholarship incentive specifically for minority students who were an education major but said that they were only available for juniors and seniors. When asked if there was a GPA requirement she said,

Yes, I think there is a GPA requirement which also makes it limited because some students have to work and struggle with their academics ... it will be nice if these incentives are also available to them so they can focus on their studies. (Jacqueline)

### **Chapter Summary**

Qualitative analysis from 20 in-depth interviews revealed five themes regarding the college experiences of the students of color in a pre-service teacher education program. *Theme One: Characteristics of Educators of Color* addressed personal information shared about the participants and their families. Participants talked about being immigrants to the U.S and/or having parents who were immigrants to the United States. Information regarding their legal and language status as well as whether they are first-generation college students was also disclosed. Additionally, participants acknowledge information regarding their internal obstacles which mostly consisted of academic and personal difficulties. Lastly, participants talked about being resilient towards different challenges that they had to face.

In *Theme Two: Education Career Motivators*, participants talked about their internal motivators to pursue a career in teaching. Furthermore, participants gave examples of different



external motivators such as growing up with other people who were educators and the job availability for teachers. Lastly, all the students shared experiences where they had the opportunity to work with students. *Theme three: Education Program Pros* focused on highlighting the positive encounters that the participants had with faculty and their cohort members. Furthermore, participants were satisfied with the classroom practices and the access to different professional opportunities. Lastly, participants described the positive experiences that they were having during their field experiences.

The final two themes focused on participants' experiences regarding obstacles on the pathway to becoming a teacher, as well as their ideas on supporting individuals of color to become teachers. Namely, *Theme Four: Career Deterrents for an Education Major* revealed different deterrents that caused doubt about continuing in the field. Participants discussed how social/cultural issues in education could deter others from a career in teaching. Additionally, participants talked about issues regarding access and preparation between high school and college, and once in college, including the components needed to become a certified teacher.

Lastly, the quality of current work environments for teachers of color raised some concerns. In *Theme Five: Ideas to Recruit and Retain Pre-Service Teachers of Color*, participants stated their ideas to help increase recruitment and retention of pre-service teachers of color. Some of the ideas included marketing and promoting the university and education program to high school students and especially targeting parents. Participants also recommended program and university leaders acknowledge the minority students on campus, increase faculty diversity, and continue working to reduce the college financial burden for pre-service students of color. In conclusion, the purpose of this study was to give voice to the experiences of pre-service teachers of color enrolled in an education program in a state in the

U.S. Northeast region. All five emergent themes portrayed their experiences and recommendations for university leaders. Chapter 5 will discuss the implications of these five themes.

## **CHAPTER FIVE: SUMMARY AND CONCLUSIONS**

This chapter provides a discussion of the results and implications for pre-service teachers of color in a teacher education program. Themes were based on the narratives of participants' lived experiences. The chapter consists of the following sections: (a) a brief overview of the study, (b) a discussion of the themes and their implications for practice and future research, (c) the limitations, and (d) a summary and conclusion.

### **Brief Overview of the Study**

The intention of this study was to explore the college experiences of pre-service teachers of color enrolled in an education program at a public university in the northeastern region of the United States. This topic was selected for two central reasons. The first was specifically because of the continuous increase of PreK-12 students of color in the country. According to Adams and McBrayer (2020), racial minorities such as African Americans, Hispanics, Asians, and multiracial people will collectively form the U.S. majority by 2044. The second reason was to investigate the shortage for teachers of color available to serve all students. The second reason was the shortage of teachers of color available to serve all students, remaining at a 20% total composition for decades as the rate of students of color in U.S. schools continuously increases (Ingersoll et al., 2021; NCES, 2023).

The study used an exploratory qualitative collective case study approach (Merriam, 1998). All 20 pre-service teachers who participated in this research study self-identified as Asian American, Black/African American, or Hispanic/Latino, and were enrolled in an education program full-time. Each completed a Student Demographic Questionnaire (SDQ) and a semi-structured interview either in-person or via Zoom. The data from the SDQ was used descriptively, and a thematic analysis approach was used to analyze the data from the interviews.

Five themes were developed from the coded data. Each theme is discussed as it relates to one or more research questions. Then, each theme is connected to the literature.

Three research questions guided this study. The themes related to each question are indicated below:

RQ 1: What factors influenced the decisions of individuals of color to pursue a career in teaching?

Theme One: *Characteristics of Educators of Color*

Theme Two: *Education Career Motivators*

RQ 2: What are the perceptions of undergraduate students of color for staying in a pre-service teacher education program?

Theme three, *Education Program Pros*

Theme Four: *Career Deterrents for an Education Major*

RQ 3: What recommendations do undergraduate students of color give to help recruit, support, and retain students of color in a pre-service teacher education program and for the teaching profession in general?

Themes Five: *Ideas to Recruit and Retain Pre-service Teachers of Color*

Appendix I contains a summary of the implications and future research recommendations for each theme and subtheme. A summary for key areas of the implications and future research are presented below.

### **Research Question One**

What factors influenced the decisions of individuals of color to pursue a career in teaching?

## Characteristics of Educators of Color

As part of practicing culturally relevant pedagogy (Ladson-Billing, 2006), educators are tasked with frequent transitioning between students’ personal lives and teaching. They try to know their students’ backgrounds, cultures, and experiences while they ensure the development of a personal connection to school (Ladson-Billing, 2006; Milner, 2011). Accordingly, to understand the implications of students of color pursuing careers in teaching, it is crucial to first unpack their common characteristics. One of the surprising findings from this study was that all the participants had immigrant parents, and 12/20 were first-generation college students. As illustrated by the themes, sub-themes and categories in Table 8, participants shared their experiences expressing different internal obstacles they overcame and instances when they had to be resilient to continue moving forward in their educational path.

**Table 8**  
*Theme One Summarized in Response to RQ1*

Theme One	Brief Definition	Sub-themes	Categories
Characteristics of Educators of Color	These features include personal origins (immigration status, language status, and first-generation college student), as well as qualities of personality, such as how to overcome internal obstacles and the meaning of resilience.	Personal Origins	Immigration Status Language fluency First-Generation College Student
		Internal Obstacles	Academic Difficulties Personal Difficulties
		Resilience	Experiences with racism Excluded because of race College processes Ability to cope and positive mindset

Furthermore, participants shared that they experienced a lack of resources and career guidance during high school, which, in some instances, continued once in college. Participants shared being lost in the process of applying to college, such as in filling out the FAFSA an application, which many of them relied on to be able to pay tuition and fees. In their study of first-generation college students, Adams and McBrayer (2020) showed similar results where the cost of college was a key factor when choosing which college to attend.

The findings on the *Characteristics of Educators of Color* also brought to light the different experiences that participants had with racism, specifically feeling excluded from opportunities because of their race. Even though 24% of the students enrolled in the education program at Welby self-identified as either Asian American, Black/African American, or Hispanic/Latino (J. Wilcox, personal communication, June 26, 2023), the participants in this study shared that they felt a lack of representation in the program and the curriculum. They expressed how the other cohort members lacked knowledge regarding the struggles of students of color, resulting in the recommendation for a diversity class.

Additionally, students shared having experienced a lack of diversity among faculty in the education program, which many felt hindered their ability to make connections for advice and mentorship or caused anxiety about being excluded in classroom discussions. Bell and Busey (2021), who also used Critical Race Theory (CRT) for their study of four Black and Latina first-generation pre-service teachers of color, showed similar results. They found that participants shared concern for a lack in faculty diversity, opportunities for diverse peer interactions, lack of similarities to their diverse upbringings, and silencing of their stories due to their race (Bell & Busey, 2021). Unlike this study, Bell and Busey (2021) further found intersections between class, gender, and language oppression within pre-service curriculum and program structure.

### ***Implications for Practice***

The diverse characteristics of the educators of color in this sample suggests that education programs should include opportunities for events and/or coursework that can provide support for students who (a) have immigrant parents, (b) are first-generation college students, and/or (c) have been ESL. Additionally, participants voiced the desire to be recognized as individuals of color, creating an event to celebrate these students and recognize the struggles that they have gone through is another way to increase a sense of belonging. The annual First-Generation College Celebration event observed nationwide on November 8<sup>th</sup> can be a great way to create programming that is needed for this population. In some universities, guest speakers, alumni, and workshops are also a part of the annual celebration (PR Newswire, 2021).

Additionally, there needs to be a commitment to not only celebrating the diversity that students bring to campus on a broad level, but also to becoming knowledgeable about the cultural backgrounds of students of color. Following the New York college system initiative of requiring students to take a diversity course to graduate can provide a way for institutions to create a more inclusive and informed college environment (Schemmel, 2023).

### ***Implications for Future Research***

As the United States becomes more racially diverse, further research regarding specific teacher education programming at college campuses for students of color with different characteristics is needed. For example, a meta-analysis of research regarding the experiences of students of color who have parents who are immigrants, are first-generation college students, or who have experienced racism will be key in understanding programming to support their educational and workforce needs. Additionally, research regarding the positive or negative

impact that taking a diversity class can have on students would inform decision-makers if more colleges should be requiring it for their students.

### **Education Career Motivators**

Similar to other studies (e.g., He et al., 2015; Moss & Ehmke, 2020), one of the key findings in this study regarding factors that influenced the decision of students of color to pursue a career in teaching was participants' desire to make an impact in this world through working with children and adolescents (see Table 9). It is worth noting that 52% of the participants shared that interest in helping children was an internal motivator compared with 38% in a study by Moss and Ehmke (2020).

Another key finding included participants' desire to be role models, especially for students of color. For some of the participants, this aspiration came from seeing a lack of teachers of color in their own educational path. This finding is supported by other studies (e.g., Plachowski, 2019; Strachan, 2020). More specifically, Strachan (2020) showed a result of two African American teachers whose motivation to teach increased as they saw the lack of representation of African American students, especially in the STEM fields.



**Table 9**

***Theme Two Summarized in Response to RQ1***

Theme Two	Brief Definition	Sub-themes	Categories
Education Career Motivators	These components address participants' perceptions that early interest in teaching, experience working with students, internal motivators, and external motivators play a role when choosing teaching as a career.	Internal Motivators	Passion for a subject Desire to make an impact in this world Be a role model
		External Motivators	Family Members Previous Teachers Job Availability
		Experience Working with Students	High school experiences College experiences

Apart from having family members who were teachers and being motivated by previous teachers, participants remarked that they were attracted to the teaching profession based on an increase of employment prospects. Students noted that there was a shortage of teachers, especially teachers of color, which gave them a greater hope of finding a job as soon as they graduated. Likewise, Garza-Rodríguez (2022) reported motivations based in the social, political, environmental, and economic environments having influenced one's decision to become a teacher. Yet, there is limited literature on how job security and availability have impacted students of color to choose teaching as a career.

***Implications for Practice***

If the desire to make a difference in the world and being a role model are career motivators, then pre-service teacher education programs might consider curriculum and programming that explores cultural and personal values as they relate to the field of teaching.

Offering diversity classes in high schools, for instance, where the students can learn about themselves, and others can increase awareness of diverse cultural and personal values.

Workshops targeting the uses of CRT can also aid in identifying the various reasons for the continuous lack of representation of teachers of color in the classroom, further empowering pre-service teachers to be the change that is needed. Marketing of statistics to prospective students and their families that delineate employment of graduates from pre-service teacher education programs can also show job security and career demand.

### ***Implications for Future Research***

Future research should be conducted to determine the effect that job availability and/or security might have on the decisions of pre-service teachers of color when choosing a career in teaching. Additionally, exploring prospective students' cultural and personal values as they relate to the field of teaching may provide best practices for education programs in their efforts to enhance their enrollments and retention rates.

### **Research Question Two**

What are the perceptions of undergraduate students of color for staying in a pre-service teacher education program?

### **Education Program Pros**

A key finding from this theme included participants' perceptions of the education program offering a supportive environment during their educational experiences (Table 10). Participants shared many instances of feeling supported by their peers and faculty. Additionally, participants highlighted their satisfaction with having classes that were both general education courses and major-specific. Furthermore, participants had opportunities to engage in professional experiences related to on campus employment and/or attending academic conferences. Feeling

supported and satisfied with these program offerings created a sense of belonging for the participants.

Studies have shown that it is crucial for students of color who tend to have negative educational experiences to feel like they belong to the school community (Fajardo Castañeda, 2014; Scott, 2018). Trent et al. (2021) found that interactions between students of color provided comfort and a shared understanding of challenges which in return helped with their sense of belonging. Moreover, the current study found that apart from just feeling supported, participants felt that they could also relate to faculty who were of color. Scott (2018) indicated that Black students felt faculty of color created safe environments for them to discuss topics regarding inclusion in education.

**Table 10**

*Theme Three Summarized in Response to RQ2*

Theme Three	Brief Definition	Sub-themes	Categories
Education Program Pros	Participants describe their perceptions of Welby’s education program, which include having a positive education program culture, satisfying program experiences, and successful field experiences.	Positive Education Program Culture	Faculty interactions Cohort member interactions
		Program Satisfaction	Many classroom practices Professional Opportunities
		Positive Field Experiences	Experiences in K-12 schools since freshman year Seeing both middle school and high school levels Improved lesson delivery over time

Another key finding was the positive experiences that students had during their field experiences as early as freshman year. The participants were able to use what was being taught in the program courses and put it into practice in their own classroom experiences. Furthermore, participants were able to use reflection to increase their teaching experiences and try new teaching techniques. Much of the literature regarding field placements have explored the interactions between the cooperating teacher and pre-service teacher or the content being taught (e.g., Bell & Busey, 2021; Pham, 2018; Rodriguez-Mojica et al., 2020; Rosenberg et al., 2021). Nonetheless, there is limited literature regarding how field experiences can be used to help develop teacher identity through reflection, especially for pre-service teachers of color.

### ***Implications for Practice***

Based on the findings from this study, education preparation program leaders and university officials need to continue making efforts to create supportive peer and faculty interactions in and outside of the classroom. Even though the COVID pandemic has created many virtual opportunities, participants benefit from having in-person gatherings such as study groups and other gatherings. Particularly when meeting with faculty members who are of a different background. In-person interactions can help establish a personal connection. As an aspect of recruiting, it is key to include students and/or faculty of color when meeting with prospective families and students.

Regarding pre-service teacher field experiences, time for self-reflection needs to be embedded into the structure of the program. Engaging in self-reflection practices further needs to be done before, during, and after field experiences. This individual or group field experience reflection time could, but does not need to, be part of formal class assignments, such as writing reflective journals or peer observations, etc. (Suphasri & Chinokul, 2021). It can instead include

informal gatherings where the pre-service teachers get to explore their individual teaching styles while talking with other peers. These gatherings can also help pre-service teachers overcome problematic issues and use their personal, cultural, and academic knowledge to overcome specific experiences while simultaneously developing their individual teacher identity. Studies have described identity development as a dynamic and multi-layered process and have provided evidence regarding the impact that teacher formation environments have on individual teacher identity (Beijaard et. al., 2004; Flores, 2020).

### ***Implications for Future Research***

Researchers can consider studying what aspects of peer or faculty support are more beneficial for pre-service teachers of color, e.g., social, academic, emotional, professional engagement outside of the program, etc. Furthermore, comparative analyses exploring peer and faculty impacts on the pre-service experiences of students of color could also include in racial congruence versus incongruence as potential mediating factors for academic success. It can also be informative to do an extensive literature review of the best reflective practices to increase the successful development of teacher identity for pre-service teachers of color before, during, and after their field experiences.

### **Research Question Three**

What recommendations do undergraduate students of color give to help recruit, support, and retain students of color in a pre-service teacher education program and for the teaching profession in general?

### **Career Deterrents for an Education Major**

Throughout the interviews, participants reflected on experiences that caused doubt or concern about continuing with education as a major. Addressing some of these concerns was key

to gaining their answers about their recommendations to help recruit, support, and retain students of color in pre-service teacher education programs. For many, a lack of guidance and academic preparation during high school and college was found to extend to the participants' formulation of recruitment and retention strategies (Table 11).

A lack of guidance and academic preparation in high school was a consequence of attending under-funded schools with overcrowded classrooms, counselors with large caseloads, and overworked teachers. Nonetheless, proponents of CRT recognize that White students tend to have access to rigorous curriculum and school resources while students of color often do not (DeCuir & Dixson, 2004; Ladson-Billings & Tate, 1995; Rayón et al., 2023; Sarette, 2022). Additionally, studies have shown evidence of the lack of support during high school and/or college for students of color (Morgan, 2019; Portnoi & Kwong, 2019; Sarette, 2022; Wells, 2020). In her literature review regarding high school dropout and college retention for students of color, Sarette (2022) found that some K-12 teachers had low expectations for students of color and there was also a lack of access to internet, food, and other necessities. As for college retention, Sarette (2022) included that there was a lack of access to accelerated courses in high school that caused issues in the access to rigor of the college classes taken by students of color.

**Table 11**

*Theme Four Summarized in Response to RQ3*

Theme Four	Brief Definition	Sub-themes	Categories
Deterrents for an Education Major	Items such as social/cultural/high school/college preparation issues, and the teacher working environments are career deterrents for an education major.	Social/Cultural Issues in Education	Lack of teachers of color Mostly female teachers Lack of a diverse curriculum Social perceptions of teaching as a career
		High School Preparation Issues	No guidance on different levels of high school classes Limited access to counselors Exclusion from AP classes and other college planning
		College Access and Preparation Issues	Stigma, college not a necessity College Not affordable Extra cost by being an education major Not enough diverse staff members and curriculum Workload considerations Lack of tutoring and preparation Staff leaving department which causes issues
		Teacher Working Environments	Differences of funding between districts School safety Limited classroom space for teaching special content (e.g., music) Low pay COVID-19 aftermath

Another finding included students' concerns regarding the hard reality of being a teacher and especially a teacher of color. Participants shared hesitation towards the working environments of teachers and society's perceptions of teaching as a career. Researchers agree

that teachers of color tend to work in environments with limited resources (Benson et al., 2021; Hopkins, 2023; Ingersoll et al., 2019; Liu et al., 2017). Ingersoll et al. (2019) reported that teachers of color disproportionately work in schools with high poverty and minority student enrollment. These schools also tend to be underfunded (Ingersoll et al, 2019). On the other hand, there is limited literature specific to society's perceptions of teaching.

### ***Implications for Practice***

Recognizing that students of color might lack academic support can motivate university leaders to create specific programming to aid in retaining these undergraduate students. One way to support pre-service teachers of color may be by pairing them with an upperclassmen mentor/tutor. Other strategies include creating biweekly or monthly check-ins with students of color by university leaders throughout the semester and offering opportunities for students of color to attend summer bridge programs, which have been successful in helping them succeed during the transition to college (Simon et. al., 2022). Once in college, university staff and faculty should be active in promoting academic resources such as tutoring centers.

### ***Implications for Future Research***

Future investigation regarding programs that specifically enhance academic preparation for students of color can yield vital information on ways to support their academic success in college. Additionally, research exploring different ways to talk about the realities of the teaching profession without discouraging students from being teachers can aid students in understanding how to better prepare for teaching. Lastly, research regarding the frequency of engaging academic resources for students of color can provide results to effectively fund the most effective supports on campus.



## **Ideas to Recruit and Retain Pre-service Teachers of Color**

There were specific recommendations given by the participants that program staff and university leaders can follow to recruit and retain students of color into education programs and for the teaching profession in general. As shown in Table 12, one finding included the participants' suggestion that recruitment begin early in the high school years as the school systems might not be exposing students to different careers. Additionally, having college class offerings for high school students can help students of color who might lack college guidance to explore and see if teaching is a career in which they are interested. Exploration of teaching as a career during the high school years have shown positive career entry outcomes in many studies (e.g., Carothers et al., 2019; Esparza et al., 2019; Gist et al., 2019; Liu et al., 2017; Sutchter et al., 2019). Carothers et al. (2019) surveyed 39 high school students attending an EDUCamp for future teachers during the summer of 2018. After engaging in various activities to explore the teaching profession for one week, 95% of participants reported that they were most likely to follow a career in teaching.

**Table 12**

***Theme Five Summarization in Response to RQ3***

Theme Five	Brief Definition	Sub-themes	Categories
Theme Five: Ideas to Recruit and Retain Pre- service Teachers of Color	Participants offer suggestions such as the increase of marketing and promotion to recruit more students as well offer suggestions to the program leaders to retain pre-service teachers of color.	Marketing and Promotion	Start early in high school Offer workshops specific to parents Promote classes or programs students can take at the college while in high school
		Programmatic Strategies	Acknowledge the minority students Hire more teachers of color Require a diversity class Find ways to reduce the college financial burden

Another theme concerned the need to market and promote college resources and offerings. Only a few participants spoke about campus employment opportunities, mentoring programs, scholarships, and other college resources. However, this may be due to the finding that many participants did not know of some or any of these resources, particularly any specific to students of color in the education program. Participants also recommended that marketing efforts to recruit students of color should start early in high school and involve family members who are helping students make their career and college decisions. Apart from this, the marketing and promotion of college resources should continue during the pre-service college years. Neither should only be presented during orientations or the first week of classes.

Another key recommendation from the participants was to continue finding ways to reduce the financial burden of attending college. Apart from tuition and/or room and board, participants shared additional costs specific to the education program, including test fees,

certifications, and online instructional platforms. These concerns have also been identified by participants in other studies, further complicating the financial situations of students of color who might otherwise choose to attend college for K-12 teaching (Adams & McBrayer, 2020; Esparza et al. 2019; James et al. 2020; Scott, 2018). Regarding college finances, another key finding was participants' concerns about completing their student teaching at the risk of working for pay.

Fifteen participants in this study had to work while tending to school to pay for their necessities. Therefore, having a semester of reduced work hours concerned them about how they were going to be academically successful if they still had to work, limiting their time for studies as well as their incomes. Literature regarding student teaching mainly focuses on its academic requirements or the connections between the cooperating teachers and pre-service teachers (Bell & Busey, 2021; Pham, 2018; Rodriguez-Mojica et al., 2020). Yet, there is limited literature regarding the financial aspects or time concerns for pre-service teachers of color.

### ***Implications for Practice***

This section will provide programming recommendations to increase pre-service teacher education program students of color based on the participants' interviews. Universities can offer formal programs like the EDU Summer Camps or Grow Your Own Teachers to include education courses for high school students where they can learn about the teaching profession and also earn college credits or stipends (Carothers et al., 2019; Gist et al., 2019). In other words, marketing and promotion must go beyond posting reminders or notifications through social media or bulletins around the schools or doing it just during the first year of the program.

Furthermore, university leaders could create programming specific to targeted audiences. For example, offering informational workshops or meetings for parents of high school students or students transitioning to college about what to expect in terms of financial and time

investments, and including the ways in which the university and/or program is prepared to support the students. While in the program, faculty, and staff should actively promote the college resources by taking students on tours to visit financial aid, academic and social emotional support offices or inviting administration from these offices to come and speak during their courses throughout the college years. Furthermore, university leaders and K-12 school systems should find ways to invest in stipends or other funds that can be used beyond the college tuition. On many occasions, students just need help locating scholarships, emergency funds, textbook vouchers, and other financial opportunities that can assist with college costs.

### ***Implications for Future Research***

Research regarding high school programs where students of color can explore teaching as a career exists, yet it is limited and nonspecific to students of color. Future research might be conducted to determine the programmatic or course components that can increase students' desires to choose teaching as a career. Furthermore, future research can be conducted to explore ways that colleges can promote their campus resources as well as see if there are any specific factors that are targeted for students of color. Lastly, research exploring the financial aspects of student teaching and resources to aid with any costs can give ideas to better support pre-service teachers of color financially.

### **Summary of Chapter**

This study explored the college experiences of students of color enrolled in a pre-service education program with the goal of providing guidelines to recruit, retain, and support students of color. This final chapter included a brief overview of the study to include its purpose and methodology. Then, a discussion of the findings was provided by the study's three research

questions including the themes that related to each query. A discussion of each theme as related to the literature and implications for practice and future studies was offered.

### **Limitations of the Study**

There were three main limitations to this study. First, only a single university program was selected for this exploratory research. Future studies could be conducted in multiple sites to offer a more robust set of recruitment and retention guidelines. Second, because this was an exploratory study, no generalizations can be inferred from it, however, the researcher has confidence in the results for this context since the sample was representative of pre-service teachers of color enrolled in the education program at Welby University. Third, a potential limitation of this study had to do with the researcher being a student of color who attended the university where this study took place. The researcher was carefully objective while analyzing the data and took measures to reduce bias, such as having the participants review and approve their interview transcripts and having the dissertation chair review all phases of data analysis.

### **Conclusions**

This work may contribute to the knowledge of pre-service teachers of color during their enrollment in an education program at a public institution. The following five conclusions can aid university leaders, education program staff, and faculty to provide effective educational experiences, multidimensional support, and programming that can aid in recruiting, supporting, and ultimately retaining and graduating pre-service teachers of color.

1. Major influences for choosing teaching as a career stem from both positive and negative cultural, educational, and social contexts, e.g., family members, educators, role models, school experiences.

2. A common perspective was that pre-service teachers of color want to make school experiences better for students of color.
3. Pre-service students of color enjoyed the interactions with faculty and cohort members in and outside of the classroom, including the many field experiences.
4. There could be improvements in the marketing of teacher education programs.
5. Better communication about academic support, financial aid, and social and emotional learning (SEL) resources will improve retention of students of color.

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## Appendices

### Appendix A: Letter to School of Professional Studies Dean

September 2022

Dear xxx:

I am currently enrolled in the doctoral program for Instructional Leadership at Welby University. This program requires that I design and implement a dissertation research study. The purpose of this letter is to request formal permission from you to access and interview undergraduate pre-service teachers conducted by me as the researcher. Through my research, I hope to build knowledge about the college experiences of students of color in a pre- pre-service teacher education program. I hope that the results from this study can provide suggestions to recruit, support, and retain students of color.

The instrumentation being used to gather the participants' perceptions is comprised of a Demographic Questionnaire and a one-on-one interview protocol in person or via the internet using questions developed by the researcher and enclosed here for your reference, each lasting approximately 30 minutes. The interview will be recorded and verified by the participant for accuracy.

This research study has been reviewed and approved by Welby University's Institutional Review Board (Protocol #2223-19). Participation or non-participation in this research will have no adverse effect on any participant in any way. Participation in this study is completely voluntary. Participants who agree to participate are free to withdraw from the study at any time. Privacy will be protected. Participant names will be numerically coded for confidentiality. Results will only be reported in a form that does not identify individuals. Redacted data can be combined with a future data set. The researcher has no supervisory relationship with any of the participants. Raw data will only be available to the researcher and her dissertation chair. A final report may be used for presentation, publication, or program review purposes.

Any information obtained through this study will remain completely confidential; only the researcher and the chairperson will have access to raw data. If you would like to discuss the study with me or have any questions about it, feel free to contact me via email or phone at (203) 300-4774.

I wish to thank you and the Department for considering this research study using its students. If you have any questions, please feel free to contact me.

Sincerely,

*Signatures of the researcher and dissertation chair were included in the letter.*

Pg. 2 Permission Letter – School of Professional Studies Dean

If you agree to have the department participate in the study, please sign the attached statement below, and kindly return it to me by January 20, 2023, and keep the attached copy for your records.

*Thank you.*

*Signatures of the researcher and dissertation chair were included in the letter.*

-----

*I, \_\_\_\_\_, am the Dean for the School of Professional Studies. I acknowledge that Mrs. Coronel has made clear to me the purpose of this research, identified any risks involved, and offered to answer any questions. I agree that the study described above can be conducted with pre-service teachers.*

\_\_\_\_\_

Please print name

Signature

Date

## **Appendix B: Letter to Education & Educational Psychology Department Chairperson**

September 2022

Dear xxx:

I am currently enrolled in the doctoral program for Instructional Leadership at Welby University. This program requires that I design and implement a dissertation research study. The purpose of this letter is to request formal permission from you to access and interview undergraduate pre-service teachers conducted by me as the researcher. Through my research, I hope to build knowledge about the college experiences of students of color in a pre- pre-service teacher program. I hope that the results from this study can provide suggestions to recruit, support, and retain students of color.

The instrumentation being used to gather the participants' perceptions is comprised of a Demographic Questionnaire and a one-on-one interview protocol in person or via the internet using questions developed by the researcher and enclosed here for your reference, each lasting approximately 30 minutes. The interview will be recorded and verified by the participant for accuracy.

This research study has been reviewed and approved by Welby University's Institutional Review Board (Protocol #xxxx). Participation or non-participation in this research will have no adverse effect on any participant in any way. Participation in this study is completely voluntary. Participants who agree to participate are free to withdraw from the study at any time. Privacy will be protected. Participant names will be numerically coded for confidentiality. Results will only be reported in a form that does not identify individuals. Redacted data can be combined with a future data set. The researcher has no supervisory relationship with any of the participants. Raw data will only be available to the researcher and her dissertation chair. A final report may be used for presentation, publication, or program review purposes.

Any information obtained through this study will remain completely confidential; only the researcher and the chairperson will have access to raw data. If you would like to discuss the study with me or have any questions about it, feel free to contact me via email or phone at (203) 300-4774.

I wish to thank you and the Department for considering this research study using its students. If you have any questions, please feel free to contact me.

Sincerely,

*Signatures of the researcher and dissertation chair were included in the letter.*

Pg. 2 Permission Letter – Education & Educational Psychology Department Chairperson

If you agree to have the department participate in the study, please sign the attached statement below, and kindly return it to me by January 15, 2023, and keep the attached copy for your records.

*Thank you.*

*Signatures of the researcher and dissertation chair were included in the letter.*

-----

*I, \_\_\_\_\_, am the Chairperson for Education & Educational Psychology Department. I acknowledge that Mrs. Coronel has made clear to me the purpose of this research, identified any risks involved, and offered to answer any questions. I agree that the study described above can be conducted with pre-service teachers.*

\_\_\_\_\_

Please print name	Signature	Date
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## Appendix C: Letter to Education & Educational Psychology Department Professor

September 2022

Dear xxx:

I am currently enrolled in the doctoral program for Instructional Leadership at Welby University. This program requires that I design and implement a dissertation research study. The purpose of this letter is to request formal permission from you to attend your class and give a five-minute presentation about my research. Through my research, I hope to build knowledge about the college experiences of students of color in a pre- pre-service teacher education program. I hope that the results from this study can provide suggestions to recruit, support, and retain students of color.

The instrumentation being used to gather the participants' perceptions is comprised of a Demographic Questionnaire and a one-on-one interview protocol in person or via the internet using questions developed by the researcher and enclosed here for your reference, each lasting approximately 30 minutes. The interview will be recorded and verified by the participant for accuracy.

This research study has been reviewed and approved by Welby University's Institutional Review Board (Protocol #xxxx). Participation or non-participation in this research will have no adverse effect on any participant in any way. Participation in this study is completely voluntary. Participants who agree to participate are free to withdraw from the study at any time. Privacy will be protected. Participant names will be numerically coded for confidentiality. Results will only be reported in a form that does not identify individuals. Redacted data can be combined with a future data set. The researcher has no supervisory relationship with any of the participants. Raw data will only be available to the researcher and her dissertation chair. A final report may be used for presentation, publication, or program review purposes; however, no identifying remarks will be made.

Any information obtained through this study will remain completely confidential; only the researcher and the chairperson will have access to raw data. If you would like to discuss the study with me or have any questions about it, feel free to contact me via email or phone at (203) 300-4774.

I wish to thank you and the Department for considering this research study using its students. If you have any questions, please feel free to contact me.

Sincerely,

*Signatures of the researcher and dissertation chair were included in the letter.*



Pg. 2 Permission Letter – Education & Educational Psychology Department Chairperson

If you agree to have the department participate in the study, please sign the attached statement below, and kindly return it to me by January 15, 2023, and keep the attached copy for your records.

*Thank you.*

*Signatures of the researcher and dissertation chair were included in the letter.*

-----

*I, \_\_\_\_\_, am a professor for the Education & Educational Psychology Department. I acknowledge that Mrs. Coronel has made clear to me the purpose of this research, identified any risks involved, and offered to answer any questions. I agree that Mrs. Coronel can attend my class and give a five-minute presentation on her research.*

\_\_\_\_\_

Please print name

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

## Appendix D: Invitation Email

September 2022

Dear Pre-service Teacher,

My name is Jessica A. Coronel, and I am currently the Associate Director of the Pre-Collegiate and Access Programs. I am also a student at Welby University, and I am conducting a research study as part of my doctoral program. I am writing this letter because I would like you to be a part of my study.

The purpose of this study is to build knowledge of your experiences as a student of color in an education major. Your experiences will benefit the recruitment, support, and retention of new students of color.

Participation would include filling out a Student Demographics Questionnaire taking approximately 5 minutes and a **one-time interview** for approximately **25** minutes with the researcher. The interviews can be done in-person, or via Zoom. Your name will not be used in the study; instead, a number will be assigned to you to maintain your anonymity. Only the researcher and the chairperson will have access to the raw data. The reflections and interviews we use will have no impact on your class grades. Interviews will be scheduled at a convenient time for you, and you will not miss any academic classes during the study. All of the information will be kept private.

**Participation in the study is completely voluntary, and if you have any questions now or during the study you may contact the researcher at [researcher's email address].**

Thank you for considering helping me with my study.

Sincerely,

*Signatures of the researcher and dissertation chair were included in the letter.*

If you would like to be in my study, please print and sign your name below, ascertaining that you are 18 years of age or older.

---

Print Name

Signature

Date

## Appendix E: Interview Consent Letter

March 22, 2022

Dear Pre-service Teacher,

Thank you for completing the Student Demographics Questionnaire (SDQ) and for sharing your information to participate in a semi-structured interview where you will share your experiences as a pre-service teacher of color. If you have changed your mind or have filled out the information in error, please let me know, and we can stop the interview. Your answers to the Student Demographics Questionnaire (SDQ) will be confidential if that is what you wish to do.

If you would like to proceed with the interview, please read the following statements and sign the portion below.

- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind. I understand that the research will not impact my grade in the course.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose, and the nature of the study explained to me in writing, and I have had the opportunity to ask questions about the study.
- I understand that my participation involves partaking in a 30 -minute virtual or in-person interview.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially; only the researcher and the chairperson will have access to the raw data and any reports coming from the research will contain pseudonyms only.
- I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising and details of my interview.
- I understand that disguised extracts from my interview may be quoted in a research dissertation, conference presentation or published in papers or program reviews.
- I understand that digitally signed consent forms and original audio recordings will be retained until August 2024.

- I understand that a transcript of my interview will be shared with me within two weeks of the interview for accuracy.
- I understand that under freedom of information legislation I am entitled to access the information I have provided at any time while it is in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

If you are willing to participate in the interview portion of the study, please fill out and sign the statement below.

*Signatures of the researcher and dissertation chair were included in the letter.*

-----

*I, \_\_\_\_\_, acknowledge that I have read the statements above and that Mrs. Coronel has made clear to me the purpose of this research, identified any risks involved, and offered to answer any questions. I agree to take part of this interview as part of this study.*

\_\_\_\_\_

Please print name	Signature	Date
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Sincerely,

*Signatures of the researcher and dissertation chair were included in the letter.*

## Appendix F: Student Demographic Questionnaire (SDQ)

1. To which gender do you identify?
  1. Female
  2. Male
  3. Transgender Female
  4. Transgender Male
  5. Gender Variant/Non-conforming
  6. Prefer not to answer
  7. Other ...
  
2. Race and/or Ethnicity
  
3. Age
  1. (18-19)
  2. (20-22)
  3. (23-25)
  
4. Current grade level classification
  1. Freshman
  2. Sophomore
  3. Junior
  4. Senior
  
5. Current enrollment status
  1. Full-time
  2. Part-time
  3. Other ...
  
6. Which grade level certification are you pursuing?
  1. Elementary (K - 6)
  2. Secondary (7 - 12)
  3. Dual Certification (K - 12)
  
7. What is your content major?
  
8. What is your current G.P.A?
  1. 2.5 – 3.0
  2. 3.1 – 3.5
  3. 3.6 – 4.0
  4. Other ...
  
9. Are you an ELL (English Language Learner) student?
  1. Yes
  2. No
  3. Unknown

10. Are you a student with Special Education needs?
  1. Yes
  2. No
  3. Unknown
  
11. Are you currently employed?
  1. Yes
  2. No
  
12. If your previous answer was yes, what is your employment?
  
13. Are you coming from another career?
  1. Yes
  2. No
  
14. Are you interested in participating in the interview portion of this study?
  1. Yes
  2. No
  
15. If you answered YES to the questions above, please include the following information so I can contact you to arrange a virtual or in-person interview?
  
16. Name
17. Preferred Email Address
18. Phone Number
19. Preferred time for an interview (Mornings, Evenings, Nights)

## **Appendix G: Interview Protocol**

1. Tell me a little bit about yourself as it relates to your role at Welby. (Probe: student year status, major).
2. What attracted you to pursue a career in education?
3. What have you enjoyed the most about participating in the education program at Welby?
4. What are some experiences that have motivated you to stay in the education program?
5. Have there been experiences that have created doubt about your decision of pursuing a career in education? Tell me more.
6. Why do you think that there is a shortage of students of color pursuing a career in education?
7. What do you think can be done to recruit more students of color in an education program?
8. Are there additional resources that students of color need to be successful in an education program?
9. What else would you like me to add or take into consideration for the purpose of this study?

## Appendix H: Codes, Sub-themes, and Themes

### *Codebook*

Theme	Sub-themes	Code	<i>n</i>	
1. Characteristics of Educators of Color	1. Personal Origins	ESL Student	14	
		First-generation college student experiences	6	
		Immigrant	14	
		Immigrant Parents	1	
		Immigrant struggles	1	
		Parents are immigrants	3	
		2. Internal Obstacles	Academic Difficulties	2
			ADHD	1
			Did not know procedures to becoming a teacher	1
			Difficulty with multiple languages	1
	I hold myself back		1	
	Lack of confidence in English		1	
	Needed to improve GPA		1	
	Self-criticism		7	
	Self-criticism comparing herself to others		1	
	Self-doubt		4	
	3. Resilience	Some Hispanics or Latinos don't want to go into teaching because they have an accent	1	
		Ability to cope	11	
		Excluded due to your ethnicity	1	
		Experience of racism	1	
		Financial aid and applications were confusing	1	
		Hard to adapt to the culture	1	
	Learned the 2 languages separately	1		
	Not inclined to continue education after HS	1		
	Not seeing people like yourself in the role	1		



		Positive mindset	12
		Pressure to succeed	2
		Returning student	1
		Special talent	4
		Transfer student	5
		Working student	9
		Total of Codes	112
2. Education			
Career	1. Internal Motivators	Appreciation for children	9
Motivators		Childhood training in music	6
		Desire to represent or advocate	27
		Desire to represent or advocate for people of color	1
		Does not care about money	1
		Enjoys teaching	5
		Excited to learn more	1
		Experience being a role model	1
		Future Career Goals	1
		Have passion to teach students	1
		Help with speech	1
		Love of history	1
		Love Teaching	3
		Loves to help others	1
		Make a difference for children	1
		Making a difference in this world	1
		Making an impact	1
		Passionate about music	2
		Played pretend teacher when young	1
		Role model	1
		Students need advocates to see people of color	1
		Teachers of color are important in education	1
		Teaching is fulfilling	1

	Teaching is fun	1
	Try to better the world through teaching	1
	Wanting to be a teacher growing up	1
	Wants to share her passion through teaching	1
2. External Motivators	Being able to get a job	1
	Career Decision process	17
	Career indecision	12
	Career reassurance	6
	Career vision	9
	Family members are teachers	5
	Good educational experience	1
	Inspirational teachers	21
	Substitute teaching experience	1
	Teacher encouragement	2
	Teachers recognized her talent	1
	Teachers were helpful	1
3. Experience Working with Students	Community Involvement	4
	Experience with ESL students	1
	Experience working with children	7
	Generation alpha needs	3
	Generation benefits	1
	Generation needs and characteristics	1
	Helped with language development	2
	I love educating people	1
	Learning to like the profession of teaching	1
	Love interacting with younger kids	1
	Motivated by being with students	1
	Negative experience in high school	2
	Seeing student growth	1
	Students attend ELL programs	1
	Student's growth	1

		Total of Codes	178
3. Education Program Pros	1. Positive Education Program Culture	Cohort connections	13
		Encouragement from teacher	1
		Excellent, caring professors	1
		Great professors	1
		Mentoring	1
		Professional mentorship	7
		Professors are enjoyable	1
		Professors as mentors	1
		Professors provided encouragement	1
		Supportive Faculty and Staff	8
	2. Program Satisfaction	Enjoys music	1
		Enjoys Program	2
		I don't find anyone to be discriminatory whatsoever	1
		Job opportunities	2
		Learning about conscious and unconscious bias	1
		Learning to collaborate	1
		Motivated over time	1
		Professional conference attendance	2
		Served as a peer mentor	1
		Stimulating course topics	7
3. Positive Field Experiences	Welcome environment	1	
	Early fieldwork experience	3	
	Enjoys field experience	2	
	Field experiences	12	
	Interacting with students	9	
	Multi-level placement exposure	2	
Student teaching	5		
		Total of Codes	88
4. Career Deterrents for an Education Major	1. Social/Cultural Issues in Education	Compete with high-paying fields	5

Cultural bias	8
Cultural bias in music	1
Cultural disconnect	7
Discrimination	1
Diversity Struggles	7
Don't think teaching is really that high up on the like dream career list	1
Gender bias	1
Historic Whiteness	6
Historic whiteness in teacher population	3
I did not see a lot of diverse teachers	1
Impact of skin color	1
Intimidating Whiteness	3
Lack of exposure to a variety of music genres	1
Lack of opportunities for teachers of color	1
Lack of representation in schools	1
Lack of role models for teachers of color	1
No teachers of color in K-12	1
Not appealing, especially after COVID	1
Not seeing people of color	1
Observed hardships	8
Racism	1
Reasons not to choose teaching	1
Respect for teachers is important	1
Stigma against teachers	1
Systemic racism	5
Systemic Racism- educational disparity	1
Teacher shortages	1
Teachers not appreciated	1
Teaching is not a desirable career	1
Teaching should have more prestige	1
Uncomfortable discussing culture	1
Undocumented families also at-risk	1

	Unsure about students of color definition	1
	Weird to seek out teachers of color	1
	Weren't many people of color who taught music	1
2. High School Preparation Issues	Lack of career awareness	6
	Lack of counselor guidance	4
	Lack of exposure to career options	1
	Lack of home guidance	5
	Lack of information regarding resources	1
	Lack of music experience	1
	Lack of resources	1
3. College Access and Preparation Issues	Being the only person of color in the classroom you don't realize how different your mentality is	1
	Classes are to spread out during the day	1
	College is expensive	2
	Complicated financial aid process	1
	Diversity-multicultural fusion needed	13
	Explain or discuss racial issues	1
	Extra year in school	1
	Financial need	3
	Financial need for extras in college	1
	Financial worries during student teaching	1
	Junior grants available	1
	Lack of diversity in university programs	1
	Lack of faculty guidance	4
	Loss of professors	1
	Multiple roles	2
	Need affordable education	1
	Need for more professor of color	1
	Need for tutoring or check-ins	1
	Not guaranteed financial aid	1
	Overwhelming field experience	1
	Payment during student teaching	1

	People think college is useless	1
	Personalized academic support- math tutor	1
	Personalized academic support not readily available	1
	Poor field transition	2
	Received a scholarship	1
	Scheduling considerations	5
	Teacher program staff changes	2
4. Teacher Working Environments	COVID-19 After math	6
	Employment struggle due to legal status	1
	Explain or discuss ethnic shortages	5
	Inequitable Funding	1
	Low pay	12
	Negative info about education on social media	1
	Overwhelming commitment to be a teacher	1
	Parental conflicts	1
	School safety	8
	School shootings causing people to leave	1
	Some teachers do not have their own classroom	1
	Teachers leaving the profession	1
	The workload for teachers is great	1
	Work intensity	5
	Total of Codes	196

5. Ideas to Recruit and Retain Pre-service Teachers of Color

1. Marketing and Promotion

Better communication about resources	1
Bring more diverse people into schools	1
Campus resources	1
Does a pretty good job about advertising	1
Get students to attend career events	1
Get students to be passionate about learning	1

	Have teachers of color speak to students	1
	Heard good things about Welby	1
	High school counselor college list	1
	Increase career awareness	20
	Invest in recruitment and awareness	3
	Need more outreach in HS	1
	Need to advertise on campus	1
	Need to advertise there are people of color in university programs	1
	Need to seek out perspectives of students of color	1
	Promote available resources	1
	Recruiters should present in classes	1
	Target parents	2
	University connections to high school	8
	Writing and tutoring centers are helpful great resources available	1
2. Programmatic Strategies	Asking students what they need	3
	Early college access	3
	Engagement encouragers	6
	Find out if they feel like they belong	1
	General scholarships	11
	Hire representative faculty	7
	Minority program support	6
	Minority program support to apply to college	1
	Minority program support to have teachers of color speak to students	1
	More workshops	1
	Need encouragement for students of color	1
	Need more cohort connections	1
	Need more support	1
	Opportunity to identify passions	8
	Personalized academic support	7

Program plan needs to be communicated early	1
Provide parent workshops about college	1
Reimbursement for tuition if you are going to be a teacher	1
Required diversity courses	2
Required education course	1
Substitute job can count as observation hours	2
Teachers introduced diversity and people of color	1
Teachers need more financial incentives	1
Teaching pipeline	1
Total of Codes	118



## Appendix I: Implications and Recommendations

### Theme One: Characteristics of Educators of Color

Sub-theme	Category	Connection to Literature	Implications for Practice	Recommendations for Future Research
<b>Personal Origins</b>	Immigration status Language fluency First-Generation college student	Adams and McBrayer, 2020; Ladson-Billing, 2006; Milner, 2011	<p>Since the participants in this study displayed diverse characteristics in addition to being pre-service teachers of color this implies that education program administrators should include opportunities for events and/or coursework that can provide support for students who (a) have immigrant parents, (b) are first-generation college students, and/or (c) have been ESL.</p>	<p>As the United States becomes more racially diverse, further research regarding specific teacher education programming at college campuses for students of color with different characteristics is needed.</p>
			<p>Since the participants voiced the desire to be recognized as individuals of color, creating an event to celebrate these students and recognize the struggles that they have gone through is another way to increase a sense of belonging. The annual First-Generation College Celebration event observed nationwide on November 8<sup>th</sup> can be a great way to create programming that is needed for this population. In some universities, guest speakers, alumni, and workshops are also a part of the annual celebration (PR Newswire, 2021).</p>	<p>A meta-analysis of research regarding the experiences of students of color who have parents who are immigrants, are first-generation college students, or who have experienced racism will be key in understanding programming to support their educational and workforce needs.</p>

<b>Sub-theme</b>	<b>Category</b>	<b>Connection to Literature</b>	<b>Implications for Practice</b>	<b>Recommendations for Future Research</b>
<b>Internal Obstacles</b>	Academic difficulties Personal difficulties	Esparza et al., 2019; Garza-Rodríguez, 2022; Trent et al., 2021	Since participants described how their academic and personal difficulties affected their educational experiences, spending time to go over mental health and academic resources should be a priority.	Future research regarding the use of mental health and academic resources on campus will be useful in promoting these services to undergraduates of color.
<b>Resilience</b>	Experiences with racism Excluded because of race College processes Ability to cope and positive mindset	Bell and Busey, 2021	Since participants reported that others have not always understood their experiences and struggles, there needs to be a commitment to not only celebrate the diversity that students bring to campus but also to become knowledgeable about the cultural backgrounds of students of color by requiring all undergrads to complete a diversity course to graduate.	Research regarding the impact of completing a diversity class could be initiated.

## Theme Two: Education Career Motivators

Sub-theme	Category	Connection to Literature	Implications for Practice	Recommendations for Future Research
<b>Internal Motivators</b>	Passion for a subject Desire to make an impact in this world Be a role model	He et al., 2015; Moss and Ehmke, 2020; Plachowski 2019; Strachan, 2020	Since the desire to make a difference in the world and the need to be role models were career motivators, then pre-service teacher education programs might consider curriculum and programming that promotes cultural and personal values as they relate to the field of teaching.	Exploring prospective students' cultural and personal values as they relate to the field of teaching may provide best practices for education programs in their efforts to enhance their enrollments and retention rates.
<b>External Motivators</b>	Family members Previous teachers Job availability	Garza-Rodríguez, 2022	Since job availability influenced career decisions, marketing of statistics to prospective students and their families that delineate employment of graduates from pre-service teacher education programs can also show job security and career demand.	Future research should be conducted to determine the effect that job availability and/or security might have on the decisions of pre-service teachers of color when choosing a career in teaching.
<b>Experience Working with Students</b>	High school experiences College experiences	Plachowski, 2019; Strachan, 2020	Since experiences working with K-12 students played a role in choosing teaching as a career, offering opportunities to interact with K-12 students is key to exploring teaching. Some of these opportunities might include volunteering at the local school.	Studies exploring the correlation between working with K-12 students and the desire to become a teacher can provide better ways to create these types of opportunities.

### Theme Three: Education Program Pros

Sub-theme	Category	Connection to Literature	Implications for Practice	Recommendations for Future Research
<b>Positive Education Program Culture</b>	Faculty interactions Cohort member interactions	Fajardo Castañeda, 2014; Scott, 2018; Trent et al., 2021	Since faculty and cohort interaction created a positive program culture, education preparation program leaders and university officials need to continue making efforts to create supportive peer and faculty interactions in and outside of the classroom.	Researchers can consider studying what aspects of peer or faculty support are more beneficial for pre-service teachers of color, e.g., social, academic, emotional, professional engagement outside of the program, etc.
<b>Program Satisfaction</b>	Many classroom practices Professional opportunities	Bell and Busey, 2021; Scott, 2018	Since participants discussed the need for classroom practices and professional opportunities that highlighted diversity, faculty should continue to engage undergraduates in classroom and professional activities that enhance their strengths.	Investigations regarding classroom practices that are most attractive to undergraduates, specifically those with characteristics representing diverse groups within the population, can be used to enhance the teaching environment to help increase academic success.
<b>Positive Field Experiences</b>	Experiences in K-12 schools since freshman year Seeing both middle school and high school levels Improved lesson delivery over time	Pham, 2018; Rodriguez-Mojica et al., 2020; Rosenberg et al., 2021	Since participants valued their field experiences, faculty members in teacher education programs can strengthen this aspect of the program by requiring a range of sites for participant experiences, followed by extensive discussions regarding their observations.	An extensive literature review of the best reflective practices regarding field experiences should be conducted and these practices should be implemented to increase the successful development of teacher identity for pre-service teachers before, during, and after their field experiences.

### Theme Four: Career Deterrents for an Education Major

Sub-theme	Category	Connection to Literature	Implications for Practice	Recommendations for Future Research
<b>Social/Cultural Issues in Education</b>	Lack of teachers of color Mostly female teachers Lack of a diverse curriculum Social perceptions of teaching as a career	DeCuir and Dixson, 2004; Ladson-Billings and Tate, 1995	Since participants shared both pros and cons of social and cultural perspectives regarding the teaching profession, teacher preparation program personnel should explore social and cultural values as they relate to the field of teaching across the education curriculum.	Differing perspectives of the profession of teaching should be explored across cultures.
<b>High School Preparation Issues</b>	No guidance on different levels of high school classes Limited access to counselors Exclusion from AP classes and other college planning	Morgan, 2019; Portnoi and Kwong, 2019; Sarette, 2022; Wells, 2020	Since undergraduates of color might lack academic support during their educational journey, university leaders need to create specific programming to aid in retaining these undergraduate students.	A future investigation regarding programs that specifically enhance academic preparation for students of color can yield vital information on ways to support their academic success in college.
<b>College Access and Preparation Issues</b>	Stigma, college not a necessity College Not affordable Extra cost by being an education major Not enough diverse staff members and curriculum	Sarette, 2022	Since participants reported experiencing college access and preparation issues, one way to support pre-service teachers of color may be by pairing them with an upperclassmen mentor/tutor. Other strategies include creating biweekly or monthly check-ins with students of color by university leaders throughout the semester and offering opportunities for students of color to attend summer bridge programs, which have been	Research regarding the frequency of engaging with academic resources for students of color can provide results to effectively fund the most effective supports on campus.

<b>Sub-theme</b>	<b>Category</b>	<b>Connection to Literature</b>	<b>Implications for Practice</b>	<b>Recommendations for Future Research</b>
	Workload considerations Lack of tutoring and preparation Staff leaving department which causes issues		successful during the transition to college (Simon et. al., 2022).	
<b>Teacher Working Environments</b>	Differences of funding between districts School safety Limited classroom space for teaching special content (e.g., music) Low pay COVID-19 aftermath	Benson et al., 2021; Hopkins, 2023; Ingersoll et al., 2019; Liu et al., 2017	Since participants shared pros and cons of teacher working environments, faculty members in teacher preparation programs need to find different ways to inform their pre-service teachers about the realities of the teaching profession.	Research exploring the realities of the teaching profession can aid students in understanding how to better prepare for teaching.

**Theme Five: Ideas to Recruit and Retain Pre-service Teachers of Color**

<b>Sub-theme</b>	<b>Category</b>	<b>Connection to Literature</b>	<b>Implications for Practice</b>	<b>Recommendations for Future Research</b>
<b>Marketing and Promotion</b>	Start early in high school Offer workshops specific to parents Promote classes or programs students can take at the college while in high school	Carothers et al., 2019; Esparza et al., 2019; Gist et al., 2019; Liu et al., 2017; Sutchter et al., 2019	Since participants began to explore a career in education as early as high school, universities can offer formal programs to include education courses for high school students where they can learn about the teaching profession and also earn college credits or stipends.	Future research might be conducted to determine the programmatic or course components that can increase high school and college students' selection of teaching as a career.
<b>Programmatic Strategies</b>	Acknowledge the minority students Hire more teachers of color Require a diversity class Find ways to reduce the college financial burden	Adams and McBrayer, 2020; Esparza et al. 2019; James et al. 2020; Scott, 2018	<p>Since participants showed a lack of knowledge regarding campus resources, teacher education program faculty members should actively promote the availability of college resources.</p> <p>Since participants shared the need for financial assistance to cover costs related to being an education major, university and K-12 school leaders and politicians should find ways to invest in stipends or other funds that can be used for tuition and other program costs.</p>	<p>Future research can be conducted to explore ways that colleges can promote their campus resources for all coeds, especially for students of color.</p> <p>Researchers could explore the financial options for future teachers and investigate best practices for making these funds available to better support pre-service teachers of color.</p>



**EdD in Instructional Leadership  
Department of Education and Educational Psychology  
Dissertation Registration Form**

Student           Jessica A. Coronel           Date           04/08/2024          

Dissertation Title:  
PERCEPTIONS OF STUDENTS OF COLOR ENROLLED IN A PRE-SERVICE  
TEACHER EDUCATION PROGRAM

Dissertation Committee Members: See attached Dissertation Approval Page

For Office Use Only.

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Director of Graduate Studies                      Signature                      Date