

Understanding the Impact of Differences



Using Tenets of Critical Race Pedagogy to Examine White Pre-Service Teachers' Perceptions of Their Black Students' Race & Culture

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Introduction

Currently teachers in the United States are culturally and socially homogeneous (Norman, Ault, Bentz, & Meskimen, 2001). Each year, U.S. teacher education programs work to prepare more than 3,500 candidates to be future educators (National Center for Education Statistics [NCES], 2016). This population of pre-service teachers (PTs), however, is overwhelmingly White, perpetuating a pattern in which 85% of all U.S. teachers are White, while Black or African American and Hispanic/Latinx teachers collectively comprise approximately 12.6% of the total (NCES, 2016).

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This hegemonic composition of U.S. teacher candidates is concerning, especially now because for the first time in the history of U.S. public schools the new collective majority of minority schoolchildren, Black and Latinx, has reached 50%, surpassing the number of White students (Maxwell, 2014). This shift in demographics poses a critical imperative for teacher preparation programs and anyone with a vested interest in the teaching and learning of historically marginalized culturally and linguistically diverse students (HMCLDS) such as Black children.

Unsurprisingly, homogeneous teaching staffs produce cultural mismatches and cultural discontinuity between teachers and students within an educational system, marked by cultural incongruity and disconnection. The cultural mismatches can produce unhealthy teacher–student relationships and deficit views of students (Doran, 2014; Ramirez, Gonzales-Galindo, & Roy, 2016).

When cultural mismatches occur in schools that serve predominantly Black students, those students often receive poor-quality instructional materials, limited resources, and limited, if not inadequate, pedagogical and curricular methods incongruent with their culture (Darling-Hammond, 2010; Irvine, 2003; Ostrander, 2015). It is within this mismatched racial and cultural context of a homogeneous U.S. teaching force and the increasingly diverse student populations that this investigation employed tenets of critical race pedagogy (CRP) to study the impact of such differences. The study will explore how two White secondary mathematics PTs' perceptions of their Black students' race and culture influenced their teaching and learning experiences during practicum.

Relevant Literature

The supporting literature for this study is drawn primarily from analyses

of the racial battles and social perspectives within education. This includes sociological literature that focuses on the educational experiences of Black youth. This literature provides understanding of how race and culture have impacted the overall scholastic experiences of Black students in U.S. public schools.

Racial Battles and Social Perspectives Within Education

Although teachers bring diverse perspectives to classrooms, there is evidence that current teaching practices and education policies transcend individual differences in ways that mirror the historical and sociocultural underpinnings of schools. How school structures, school processes, and race influence PTs' perceptions or help to sustain inequality is an important consideration in this study.

Additionally, PTs' assumptions about race and culture, including holding cultural deficit theories about Black students or discomfort with race-related issues, are significant because they accentuate historical sociocultural forces that have shaped the schooling experiences of Black children. To further underscore the significance of PTs' comments in this study, relevant literature about current racialized schooling experiences of Black students as well as the impact of cultural mismatches and biases within schools will be highlighted.

Education scholar Linda Darling-Hammond (2010) posited that Black children have not been intentionally or deliberately envisioned as part of the focus when schools seek to strengthen students' academics. She reported that more than 20 states in the U.S. have significantly fewer resources for Black children in their schools based on every tangible measure, including class size, textbooks, computer facilities, and curriculum offerings.

For instance, in 2014, the U.S. Department of Education Office of Civil Rights college readiness report found that one-fourth of high schools with the highest percentage of Black children did not offer basic courses as compared to schools with predominantly White students, thus limiting Black children's access to rigorous, cognitively demanding curriculum and instruction. Arguably,

this current unequal access to equitable and culturally responsive school curriculum and instruction for Black children stems from historic schooling experiences and cultural mismatches in schools.

In fact, the absence of cultural synchronization between teachers and students has garnered national attention and has been credited with current inequitable race-based educational practices in both school discipline and academic tracking (Puchner & Markowitz, 2015).

Unfair Race-Based Discipline Practices. For decades, research (see Barton & Nishioka, 2014; George, 2015; Losen, 2013; McCray, Beachum, & Yawn, 2015; Skiba, Eckes, & Brown, 2009) has highlighted disparities related to race in the administration of school discipline. The dynamics of race-based practices have negatively and unfairly impacted Black children throughout the history of U.S. schools. However, only within the last few years have racial disparities in discipline garnered national attention.

Most significantly, according to Gregory et al. (2016), joint guidance issued by the U.S. Departments of Justice and Education, the Department of Education Office for Civil Rights, and recent national news reports have put schools on notice of their obligations and responsibilities in the administration of fair and just school discipline, suggesting that there is a great need for strengthening civil rights enforcement in education.

Current school discipline policies illustrate school surveillance that is centered on racial profiling, disproportionately targeting Black students for disciplinary action. For example, although Black students represent approximately 16% of the U.S. public school population, they represent more than 30% of the suspensions and expulsions (Haight, Kayama, & Gibson, 2016; McCray, Beachum, & Yawn, 2015).

Excessive school discipline through suspension and expulsion shapes the relationship between prison and education and creates fundamentally different experiences for Black and White children (Meiners, 2007; Porter, 2015). In fact the engagement of schools in racial profiling and surveillance practices has a startling resemblance to the practices found outside of schools (Howard, 2010) and helps to exacerbate

an already problematic pattern of race, class, and gender division across the U.S. (Meiners, 2007).

Recent 2014 Federal Bureau of Investigation (FBI) arrest records show that in many cities and small suburban towns across the U.S., Blacks are arrested at rates from 10% to 26% higher than any other race, despite making up only 4%–8% of those cities' and suburban towns' populations (Heath, 2014). Some education scholars (see Barton & Nishioka, 2014; Darling-Hammond, 2010; Ford & King, 2014; George, 2015; Jackson & Howard, 2014; Martin, 2012; Meiners, 2007) have argued that this similarity between FBI arrest reports and national school discipline reports is no coincidence and that contemporary educational policies and practices promoting mass expulsion and increasing dropout rates for Black students work to criminalize Black youth through mandatory referrals to the criminal justice system.

Unfair Race-Based Academic Tracking. Race continues to play distinct roles in differential academic placements for HMCLDS, such as Black children (Ford, 2015; Ford & King, 2014; Modica, 2015), and is a primary factor in determining assignments to high school honors courses and special education programs (Cowan Pitre, 2014; Ford, 2015; Ford & King, 2014). Race-based differential placements or academic tracking continues to ration high-quality education to a relative few (Ford, 2015) and decreases the scope by which different kinds of students have opportunities to interact with each other and gain access to various perspectives.

The schools' practice of race-based academic tracking often creates a lack of access to more challenging curriculum and effective instruction, closing off many high-quality opportunities for a large percentage of Black students (McDaniel & Kuehn, 2013). Due to such practices Black children are strongly underrepresented in rigorous academic courses, including gifted, honors, and Advanced Placement programs, while they are overrepresented in special education programs.

In public schools across the U.S. Black students represent less than 10% of the gifted and talented education programs

for advanced classes (Ford, 2014), make up more than 33% of students labeled mentally retarded or cognitively disabled (Ford & King, 2014), and have the highest dropout rate at 17.1% (Suhyun, Malchow, & Jingyo, 2014) and the lowest college enrollment rate (Rosser-Mims, Palmer, & Harroff, 2014).

Taken together these two practices of race-based discipline and academic tracking continue to victimize and criminalize Black youth as they become unwillingly caught up in systems that track them from the hallways of schools to the blocks of prison cells.

Cultural Mismatch Leads to Negative Schooling Experiences for HMCLDS

By drawing on discussions about the schooling experiences of Black children which focus on how race and culture impact teaching practices, this investigation aims to give a holistic approach to understanding the implications of PTs' comments. Several studies (see Aguirre, Zavala, & Katanyoutanant, 2012; Brown & Crippen, 2016; Daniel, 2016; Kea & Trent, 2013) associated with teacher preparation have explored how PTs grapple with improving pedagogical content or implementing learned pedagogical practices with Black children, but few studies have examined in what ways racial and cultural preconceptions influence how PTs attend to teaching HMCLDS, such as Black students.

This study is a start toward such an investigation. In the following two sections, key scholarly literature centered on the consequences of education issues and practices, such as cultural mismatch between teachers, schools, and students as well as personal and structural biases that impact the overall sociocultural beginnings of schools, more specifically, how teachers teach HMCLDS, is discussed.

Owing to their current demographic makeup, many U.S. public schools can be characterized as *cultural interface zones*, in which the culture of students and the culture of the teachers are in conflict, and when the balance of power of such conflicts is not negotiated, student academic achievement suffers (Norman, Ault, Bentz, & Meskimen, 2001). These cultural mismatches in classrooms are often a reflection of

broader discontinuities between school culture and the home culture of HMCLDS (Howard, 2008).

One major consequence of school cultural mismatch is that teachers have limited ability to connect curriculum with students' out-of-school practices. This lack of connection has not gone unnoticed. Notable education scholars, such as Gay (2002, 2013), Irvine (2010), and Ladson-Billings (1994, 2006), have called for the promotion of cultural competence in classrooms as a matter of ethical commitment when teachers of HMCLDS undertake viable strategies for instruction. However, for many schools across the United States, this call has not been realized.

Even with reports and classic demonstrations of how cultural congruity between teachers and HMCLDS may help to bolster student performances, many teachers continue to struggle with connecting school curriculum to historical, cultural, social, and political aspects of their students' lives (Tinkler & Tinkler, 2013; J. Waddell & Ukpokodu, 2012). This connection, however, is critical to the teaching and learning of HMCLDS as it affords students opportunities to challenge inequities and their positions in society.

Utilizing reflections and interviews of 17 in-service teachers, Wager maintained that teachers' understanding of students' community and cultural knowledge is instrumental for students to experience academic success. Teachers with knowledge of and experiences with HMCLDS can help to sustain their students' cultural integrity as they aspire to achieve academic excellence (Clewell, Puma, & McKay, 2005; Villegas & Lucas, 2002, 2004; Villegas & Irvine, 2010).

However, educators serving HMCLDS who have limited knowledge, interactions, and understanding of diverse races and cultures negatively impact scholastic performance (see Gay & Kirkland, 2003; Irvine, 2010; LaDuke, 2009). Limited interactions, knowledge, and experience with diverse students fuel racial and cultural disconnect in classrooms. A lack of understanding of and experiences with HMCLDS can create negative teacher–student relationships and missed opportunities for teachers to create safe and inclusive classroom spaces.

White teachers from homogeneous upbringings with limited experiences with HMCLDS, such as Black children, struggle to connect with HMCLDS, because they tend to view racial and cultural issues as controversial (Buchanan, 2015) and lack much-needed critical empathy for their students. According to Warren (2013), through critical empathy, educators who know of unjust and unfair situations assist students with ways to challenge such situations and thereby further social justice. Subsequently, the struggle to connect with students and engage in passive empathy (Boler, 1997) thwarts opportunities for developing meaningful and positive teacher–student relationships.

Akin to understanding students' racial and cultural experiences, developing positive teacher–student relationships is vital to discussing how PTs teach HMCLDS. Battey (2013) asserted that relational interactions between teachers and students are important factors in shaping quality instruction that seeks to encourage students' strategies, affirm students' abilities, connect curriculum to familiar contexts for students, and help move students to more sophisticated understandings of the world, consequently creating safe and inclusive classroom environments that support students' need to think carefully about how they fit into the classroom environment and how they can positively influence their environment.

As fashioners of the classroom, teachers also need to think about how they situate themselves in the classroom communities they are fashioning (L. Waddell, 2014). By examining their own personal beliefs, cultures, and learning habits and how these beliefs and habits influence their teaching practices and instruction, teachers can use students' cultural knowledge as a vehicle for learning (Gay, 2000, 2002; Irvine, 2003; Ladson-Billings, 1995a, 1995b).

However, the racial and social organization of schools is not the only factor that impacts teachers' preconceptions about teaching HMCLDS. It is also important to consider how structural and personal biases of prospective and practicing teachers impact the scholastic experiences of HMCLDS (Daniel, 2016; Ng, 2006). Therefore what follows is a brief discussion of the ways teachers'

personal and schools' structural biases influence the schooling experiences of HMCLDS, focusing specifically on some of the personal biases teachers bring to their classrooms and the many structural biases that are enforced in schools through policies and common practices.

Personal and Structural Biases Help Shape Negative Schooling Experiences of HMCLDS

Teachers' personal biases. Teaching is a fundamentally social activity (Ng, 2006), and as members of a racial and cultural society, teachers' preconceptions of HMCLDS, particularly Black children, stem from sociocultural biases, absence of race consciousness, and negative attitudes toward students' racial and cultural difference, all of which damagingly impacts students' learning (E. Young, 2010). The sociocultural biases and absence of race consciousness make it reasonable to expect challenges in developing positive teacher–student relationships, especially when teachers whose backgrounds are culturally incongruent with their students' can hold biased perceptions of their students' unfamiliar experiences (Anderson & Span, 2016; Ani, 2013; Gutstein, 2009, 2010; Irvine, 1999, 2003; Pittman, 2010).

An overabundance of negative imagery and sounds from media outlets like television, film, music videos, advertising, social media, and the Internet have helped to shape teachers' negative opinions and beliefs about HMCLDS, particularly Black children (Childs, 2014; Cortes, 2001; Frye, Button, Kelly, & Button, 2010; Howard, 2008). With a negative outpouring of messages about Black children, teachers develop fear and inaccurate preconceptions about their Black students. Teacher biases refer to their own preferences and impartial judgment stemming from learned prejudices (Jackson, Appelgate, Seiler, Sheth, & Nadolny, 2016).

It is important to highlight teacher biases about HMCLDS because biased preconceptions negatively shape students' overall schooling experiences, including how students receive punitive consequences for school-related infractions (Spencer, 2009). Typically, teachers with negative preconceptions about their students based on race or culture lack

understanding of their students' out-of-school experiences (Pittman, 2010) and, consequently, experience strained classroom interactions.

PTs' racial and cultural preconceptions about students' race and culture not only impact their own approach to teaching and learning but can engender anxiety in students, affect teacher curricular planning choices, influence the extent to which students receive punitive consequences for school infractions, their own ability to teach, and their perspectives of students' abilities (Dunleavy, 2015; Geist, 2015; Pittman, 2010; Simic-Muller, Fernandes, & Felton-Koestler, 2015; Spencer, 2009). Biased preconceptions are often a result of teachers possessing limited knowledge about how to access their students' cultural referents, potentially causing teachers to develop negative attitudes about their students.

Teachers with negative attitudes toward students can form conflictual teacher–student relationships. Negative teacher attitudes refer to actionable manner, disposition, and emotions teachers use to express their views of students (Keller Boudreaux, 2016; Williams, Edwards, Kuhel, & Lim, 2016). These teacher views and practices stemming from cultural incongruity can cause teachers to treat HMCLDS as invisible and lead to eventual missed opportunities that would otherwise highlight student contributions (Greenfield, 2016; Ramirez, Gonzales-Galindo, & Roy, 2016).

School systems' structural biases. School systems' structural biases are historically marked by educational and social policies and practices that favor White students and hold negative preconceptions or prejudices against non-White students that inhibit opportunities for universal academic success (Buchanan, 2016; Howard, 2010; Payne, 2008; Reyes & Villarreal, 2016). Structural biases in education are significant when examining how teachers support the learning of HMCLDS.

Biases embedded within the U.S. education system often occur at the intersection of race and socioeconomics (Lumpkin, 2016; Young, Young, & Ford, 2017) and can include school culture, teacher practices, and learning materials, such as textbooks, that are not

supportive of HMCLDS. Structural biases undermine teachers' abilities to facilitate learning (Bauml, 2015). For example, the problem with the biases in learning materials like textbooks is that many teachers often rely on textbooks as the primary resource in their classrooms.

Although textbooks may appear to be well organized, with good content criteria and supplementary resource materials for both teachers and students, there is typically little to no evidence of inclusion, equity, and diversity in textbooks (Chan, 2013; Sleeter & Stillman, 2013; Valenzuela, 2013). In fact, heavy use of textbooks can further exacerbate problems related to teachers connecting to their students, given that current curriculum in textbooks is typically not culturally diverse but instead deeply rooted in cultural experiences synonymous primarily with America's White middle class (Oliver & Oliver, 2013). Pellegrino, Mann, and Russell (2013) have suggested that teachers are overusing textbooks and influencing the scope and sequence of curricular content instead of encouraging critical analysis and interpretative thinking skills.

In other words, owing to the excessive use of textbooks in the classroom, concepts and frameworks of textbooks become the primary lens through which students gain knowledge for the rest of their lives. With limited diversity within textbooks, students are then provided a narrow scope of curriculum, uncomplimentary to their diverse needs. Thus the biases in textbooks can serve as a major obstacle in many classrooms.

Summary of the Literature

From the reviewed literature, we can see that the structure of school systems significantly relates to past and current social arrangements and relationships (Ng, 2006), thus emphasizing schools' social foundations and accentuating explicit contexts of schooling for HMCLDS. Racial, cultural, economic, and political dynamics, methods, resources, and distributive processes, including interactional relations and personal, structural, and procedural processes all describe the distinctive conditions of school life for both teachers and students (Edwards, 2016; Ng, 2006; Winsboro & Bartley,

2014). These schooling experiences for Black children, reflecting aspects of racial, cultural, structural, and social injustice, could impact prospective and practicing teachers' perceptions about teaching and learning with HMCLDS. It then follows that more research is needed to explore PTs' experiences with teaching HMCLDS.

Understandably, PTs' appreciation of their students' racial and cultural difference could lead to improved schooling experiences for all students. As Hollins and Guzman (2005) and Tinkler and Tinkler (2013) have suggested, we need more research that examines links and transformations between teachers' perceptions of students and how they practice teaching and learning with those students. Through this investigative report I seek to begin to fill that gap.

The reported findings of this study highlight how PTs situate their racial and cultural differences from their Black students. Tenets from CRP are used as a conceptual framework to discuss the reported findings. The question guiding this inquiry was, *How do White PTs' perceptions of their Black students' race and culture impact teaching and learning experiences at their practicum sites?*

Conceptual Framework

To make sense of the PTs' comments and experiences, the investigation employed a CRP lens as offered by education scholars Solórzano and Yosso (2001). CRP is derived from principles of critical race theory (CRT) and helps to make CRT relevant to schooling. To better understand the foundations of CRP, the following paragraphs provide more information about CRT and its impact in education.

Critical Race Theory

As a product of the legal studies movement of the 1970s (Closson, 2010), CRT theorists seek to liberate, empower, and promote justice (Delgado & Stefancic, 2001). CRT is a theory used by those who challenge inequitable situations (Crotty, 1998), such as genetic and cultural deficit theories about students of color (Solórzano & Yosso, 2002).

Historically, CRT was a response to the limitations of the critical legal

studies movement (Delgado & Stefancic, 2001) and has been used to address issues of race and race relations in the U.S. and, more recently, its education system. Within education, CRT challenges dominant notions and discourses in education through rich and deep deconstruction of racist policies and procedures (Ladson-Billings & Tate, 1995).

Even more, the CRT framework assists with analysis of educational practices and expectations that contribute to race-based disparities in schools and offers approaches to combat racism in education. CRT provides researchers with a framework to challenge leading discourse on race, racism, and culture as it relates to education by examining how education theory and practice are used to downgrade certain racial and ethnic groups (Solórzano & Yosso, 2002). CRT in teacher education seeks to identify, analyze, and transform subtle and overt practices of inequality within the education system by addressing how educational structures, processes, and discourses function to maintain unequal treatment of students of color (Solórzano & Yosso, 2002).

Critical Race Pedagogy

According to Jennings and Lynn (2005), CRP is a "theoretical construct that addresses the complexity of race and education" (p. 24) and helps to make principles of CRT relevant to schooling. Subscribers to CRT in education (e.g., Ladson-Billings & Tate, 1995; Solórzano & Yosso, 2001) have argued that examining PTs' assumptions about race and culture is significant in teacher education programs, as it is meant to disrupt PTs' thinking about race and racism.

Therefore, as an extension of CRT, using a CRP conceptual framework to govern the examination of PTs' perceptions about difference in race and culture in this study can be part of a larger examination of educational norms and beliefs that contribute to the subordination of certain racial groups (Solórzano & Yosso, 2002).

PTs' perceptions about students, being complex and occurring at the intersectionality of race and culture, require a theoretical framework that challenges dominant social and cultural assumptions regarding race, culture,

intelligence, language, and capability. CRP provides researchers with a conceptual framework to challenge perceptions and dominant discourse on race, racism, and culture as it relates to education by examining how education theory and practice are used to downgrade certain racial and ethnic groups (Solórzano & Yosso, 2002).

Theoretically, CRP in education establishes a lens that supports the need for PTs to become more conscious of their perceptions about their own culture and the social culture around them (Cerezo, McWhirter, Peña, Valdez, & Bustos, 2014). From the principles and ideologies of CRT, education scholars (see Solórzano & Yosso, 2001) derived CRP principles to include the following tenets that are relevant to this investigation:

1. Examination of how dominant social and cultural assumptions regarding race, culture, and other forms of subordination maintain inequality in curricular structures, processes, and discourse.
2. Identification of inequitable situations, such as cultural deficit theories about students of color.
3. Examination of how teachers engage in meaningful race-related conversations.
4. Identification of whether Black children's racial identities influence PSTs' beliefs and perceptions.
5. Examination of how structures, processes, and discourse maintain unequal treatment of children of color.

Research Design and Method

This case study highlights how PTs' awareness of the racial and cultural differences between themselves and their students impacted their teaching and learning during their mathematics methods coursework and internships throughout a yearlong summer-to-summer initial teacher preparation and certification program that was part of a master of arts of teaching (MAT) cohort program at an urban university in the Southeast region of the United States.

Teacher Preparation Program Description. The MAT degree programs are designed for students who hold a bachelor's degree and wish to obtain

both a master's degree and initial teaching certification in their chosen field. The program includes major in-depth practicum teaching experience at the appropriate levels. Throughout the yearlong summer-to-summer MAT program, PTs are required to take a combination of online and face-to-face classes.

School Placements for PTs' Internships.

The program seeks candidates willing to teach in urban schools, urban being defined as within metropolitan city limits, with Black/Latinx student populations of over 90%. Alumni employers of the program typically include urban district schools in the region. Inclusion of the employers of the program's alumni places emphasis on the demographics of the schools served by the program and shows that the program's location and internship placements for PTs' teaching and learning experiences were appropriate for this study. PTs within the program are typically placed at predominantly Black schools, and the PTs in this study, Ashley and Genna (pseudonyms are used for names of participants) were no exception.

Course Description. The investigation's timeline spanned two semesters. The chosen courses were an Introductory Methods course during the university's June 2016 semester and an Advanced Theory and Pedagogy Methods course during the university's fall 2016 semester. The courses' objectives and standards were relevant to the purposes of this investigation.

Within these courses, students actively examine the nature of secondary students and schools and explore instructional materials, teaching strategies, technology, and effective teaching. Students in both mathematics methods courses engaged in historical and current research within the field of mathematics education. A critical analysis of the structures of schools and the teaching and learning of mathematics was coupled with a focus on earlier scholarship of John Dewey, W. E. B. Du Bois, and Paulo Freire.

Examination of equity issues in mathematics education and the situated, culturally relevant, and critical perspectives of sociocultural philosophy

of education and an understanding of mathematics teaching and learning, which aimed to engage all children in the learning of meaningful mathematics with an emphasis on historically marginalized students (i.e., female students, students of color, low-socio-economic students, etc.), were central to the courses.

Participant Selection

Graduate-level PTs were selected from a population of 13, 10 of whom were White and 12 of whom were monolingual English speakers, and included 11 women and two men. The demographics of the population generally mirrored the U.S. secondary mathematics teaching force, which is approximately 81.5% White and 77% female (NCES, 2016). From the population of 13, two PTs were chosen for this study.

The selection of the two participants, Ashley and Genna, was convenient, practical, and feasible given the investigation's time constraints. An open-ended questionnaire was administered to the population, and two White volunteers who had limited experience with diverse cultures were selected. This selection process complemented the research inquiry into how racial and cultural differences influence teaching and learning.

Participants

Selecting these PTs was instrumental to the purpose of the investigation and demonstrated how impactful race and culture are to PTs and their interactions with Black students. Aside from selecting PTs who were White and had limited experiences with culturally and linguistically diverse students, such as Black children, no attempt was made to further screen participants. In what follows, I use participants' own words to briefly describe their upbringing:

Ashley: I am 23 years. I grew up in a small, mostly White town with only one elementary, middle, and high school. So, my overall life experiences have occurred within predominantly White contexts. When friends, family, and other teachers found out my school placement with teaching Black students, I heard their assumptions. I heard, "Those kids cannot do math,"

"Those kids won't learn," "Do they all get free lunch?," and "Oh, they are probably 'thugs.'" It's tough.

Genna: I just turned 23. I grew up in a small town with a relatively homogeneous population—everyone looked like me, talked like me, and believed like me. I was homeschooled until high school so that my mom could "shield" me from the real world and those who would try to lead me astray. I was always protected.

Data Source

This study utilized two recorded 60-minute semistructured interviews to arrive at its findings. The semistructured individual interviews occurred on two separate occasions, during which time the PTs were asked to share their views on race, culture, and CRMP in education. The semistructured interviews highlighted issues pertinent to this investigation and served as an opportunity to elaborate and extend PTs' experiences at their school placements.

Denzin and Lincoln (2003) have opined that collecting data through interviews offers the potential to capture a person's perspective of an event or experience. Additionally, an individual 30-minute member checking session was conducted with each PT. During the member checking process, transcriptions of the recorded interviews were given to PTs for their review, and PTs were offered opportunities to expand on their statements.

Data Analysis

Through an iterative analysis of the data, constructs of the conceptual framework were used to examine PTs' racial and cultural experiences at their placement sites. PTs' interviews were analyzed using constant comparative methods (Corbin & Strauss, 2008). For example, when a PT referred to a race or culture issue with his or her Black students, I reviewed the other interviews to see if the other PT shared similar experiences.

After combing the data for PTs' racial and cultural experiences, I analyzed the data for PTs' sense making and interpretation. Although some variations existed in the ways PTs embraced and

interpreted racial and cultural in-class experiences, the overarching theme that emerged was based on frequency of occurrence. Finally, I recoded the data again using the five constructs from the conceptual framework.

Discussion of Research Findings

The PTs in this study were aware of racial and cultural differences between themselves and their students and explicitly expressed how those differences impacted their teaching experiences. Using the CRP tenets, the following sections demonstrate how PTs openly: (a) engaged in discourse that supported dominant social and cultural assumptions about their students' race, culture, and intelligence as subordinate; (b) participated in cultural deficit theories about their Black students; (c) expressed discomfort with engaging in meaningful race-related conversations that could lead toward creating more equitable and just school experiences; (d) shared how their Black students' racial identities influenced their beliefs and perceptions about teaching and learning; and (e) exhibited awareness, without action, about how structures and narratives work to the disadvantage of their Black students.

The findings presented here reveal the ongoing challenge teacher educators and those with a vested interest in preparing PTs to meet the needs of HMCLDS, such as Black children, face with dismantling dominant cultural narratives about race and culture and the negative impact such narratives have on HMCLDS.

Tenet 1: Formulating Racial and Cultural Assumptions About Students' Home Lives

Historically indoctrination involving negative and biased social and cultural assumptions about the intelligence and abilities of students of color has been problematic (Gay, 2000, 2002; Irvine, 2003; Ladson-Billings, 1995a, 1995b; Nasir, 2016). Most often, educational expectations are rooted in White cultural norms (Adams, 2005; Clewell, Puma, & McKay, 2005; Karkouti, 2016; Villegas & Irvine, 2010; Villegas & Lucas, 2002, 2004) that lack diverse perspectives.

In this study, both PTs held negative assumptions about the home lives of their Black students:

Ashley: Most of my students' parents have not attended college. So, culturally the students are used to stopping their education after high school or in the middle. I'm aware of broken families, students come from and bad examples of love they have seen. I share stories about my life with my students and they are surprised. Students would say, "I hope I am as happy as you one day."

Genna: My thinking is that my students most likely have nontraditional homes, and parents who are too busy to care, many of them would not go to college because it doesn't seem like a priority for my students. . . . I have communicated with several parents from this class who are concerned about their students, so at least some students have some supports at home.

Both Ashley's and Genna's comments demonstrated how White PTs from cultures incongruent to their Black students' culture formulate negative cultural assumptions about their students' home lives. Ashley, using the guidance of a CRP lens, described how teachers can hold cultural assumptions of students' home lives, rendering it deficient and unauthentic. Here we see that Ashley viewed her own home life experiences as a superior gold standard to the experiences of her Black students.

Moreover, her statement about claiming awareness of the "broken families . . . and . . . bad examples of love" her students have witnessed suggested that Ashley feels confident in the assumptions she has made about her students' cultural backgrounds. Ashley's distinct lack of understanding of the Black culture of her students is problematic (Clewell et al., 2005; Villegas & Lucas, 2002, 2004) and leads to productive questions about how teacher preparation programs can begin to examine PTs' racial and cultural assumptions about their students. Assisting PTs with ways to examine their own implicit and explicit biases could combat and prevent such biases from seeping into teaching practices.

Like Ashley's, Genna's comment revealed how she views her Black students through a deficit lens and demonstrates

how a White PT with cultural mismatch to her Black students secures privilege status over Black students. By commenting that Black students' home environments were "nontraditional," with "parents who are too busy to care," Genna began to form habits of deficit thinking; namely, when Genna described the parental involvement and participation she received from Black parents as "at least some students have some supports at home," she implicitly suggested that Black students do not typically have support at home, negatively informing her view of her students' home lives.

Furthermore, even though Genna conceded that several Black parents inquired about their children, the use of the words "some students" greatly diminished her view about the support Black children receive from their parents. This was likely due to an assumption that Black students do not normally have support at home from their parents, so in her statement, Genna used condescending words as descriptors to suggest lack of parental care and concern.

These forms of negative cultural assumptions are not surprising and are often a result of an overabundance of negative imagery and sounds about Black families (Childs, 2014; Cortes, 2001; Howard, 2008). Given PTs' cultural incongruence and susceptibility to negative stereotypes about their Black students, the potential for critical examination of formulated racial and cultural assumptions within teacher education programs exists.

Tenet 2: Holding Cultural Deficit Theories About Students' Intelligence

Deficit perspectives about historically marginalized students continue to plague our nation's education system (Anderson & Span, 2016; Ani, 2013; Irvine, 1999, 2003; Pittman, 2010). Deficit perspectives cause educators and caring adults to have lower expectations for HMCLDS (Toldson & Johns, 2016). Dominant views of HMCLD, such as Black children, are generally grounded in assimilation- and deficit-based practices (Greenfield, 2016).

Both Ashley and Genna held deficit views of their students' intelligence. Genna shared the following:

Because I don't believe that one race is inherently dumber than others, I must conclude that the way math is taught and assessed is what is causing Black students to fail at much higher rates than White students. . . . In addition to low mathematical understanding, there is a language barrier between me and some students. I am still a little bit wary of raising my standards of discipline and achievement too high.

In this excerpt, Genna was able to point to a gap in the mathematics and science performance of the Black and White students at her school. Although she posited that the gap in performance between the races must be due to the way mathematics and science content is being taught at her school, Genna stated that she was hesitant to raise academic and discipline standards for her students.

Her comments were inconsistent with her practice and demonstrated how she began to form habits of assumptions and practice. On one hand, Genna attributed Black students' mathematics and science performance to the way students were being taught, yet in her practice, she was reluctant to raise academic and discipline standards "too high" for her Black students.

Genna's practice suggests that she has internalized negative views about her Black students' intelligence and capabilities. The context and circumstances of Genna's wariness to raise standards of discipline and academic expectations for her Black students matter, because students will not reach for goals that are not set for them.

Genna's caution toward holding high expectations of her Black students could have resulted from accessed stereotypes, which can unconsciously affect teachers' behavior in classrooms, including limiting expectations and lowering the quality of instruction (Sparks, 2016). In fact, it becomes very challenging for teachers to produce excelling students of any race or culture when expecting those students to perform poorly and fearing to teach them at higher levels.

Genna's statement reflected her exposure to broad deficit ideologies of students of color (Battley & Leyva, 2016). Even more, Genna's experience pointed

to the fact that as a White female PT in a position of privilege, Genna would not want to acknowledge that other historic and systemic factors impact Black students' mathematics and science performance scores, such as access and opportunity to equitable resources.

Her privileged position makes her oblivious to educational policies and practices that lead to inequitable funding for K–12 schools specifically serving students of color (Adamson & Darling-Hammond, 2012; Brunn-Bevel & Byrd, 2015; Cross, 2007; Darling-Hammond, 2010; Gutstein, 2009, 2010; Monroe, 2016). Herein lies the potential for teacher educator programs to examine racial and cultural biases of PTs and to be more intentional about developing PTs' understanding of the multifaceted factors impacting students' performance on standardized tests, including historical marginalization, inequitable access, and unequal opportunities.

Tenet 3: Evasive Engagement With Race-Related Conversations

Neither of the participants engaged students in conversations that led to actual changes in school policy or practices. Neither did any of their conversations with their Black students produce more equitable and just school experiences. For the most part, both White PTs felt alienated from their students due to racial and cultural differences. Neither understood their students' racial and sociocultural circumstances, but they did acknowledge their own privileged positions.

Even more, both struggled to show sensitivity to their students. This was mostly evident in Genna's comments during her interview, when she shared her experience of how she interacted and conversed with students about issues pertaining to race:

A few weeks ago, several students passionately shared with me an encounter between a principal and a student about the Black Lives Matter organization. The students were feeling discriminated against by a member of the administration. Then our school had a Black Lives Matter rally and I just talked to all my students that day. I mean it was

just kinda like a wasted day in school anyway because tensions were high and people were excited and not a lot got done and I think even three periods of the day were spent in the cafeteria for most people. But I talked to every one of my students that day and told them how I felt about them and how I don't think that things are fair and that I am sorry that things happened and that I know they know that I am privileged and that I don't really understand their situation.

Genna's actions of not pursuing race-based issues and of not extending conversations with her students to bring about change are not unusual. Using a CRP lens to examine Genna's actions shows an assertion and acceptance of her White privilege and a disregard for her students' concern, as she referred to the students' participation in the Black Lives Matter protest as a wasted day. Her thoughts illustrated Boler's (1997) passive empathy rather than critical empathy (Warren, 2013).

While Genna's reflection of the students' plight was a first step toward being emphatic, she failed to push further to help students work toward a solution, even if that solution meant speaking with administration. Understandably, Genna's position as a PT limited the scope of her influence with her hosting school's administration. However, in the retelling of her experience with this situation of a possible protest regarding discriminatory practices toward her students, she did not provide a plan of action that she would have taken if she were a full-fledged teacher.

Within Genna's passive empathy and insensitivity toward her students lies the potential for teacher educators to assist PTs with developing racial and sociocultural consciousness of HMCLDs, particularly Black children, through mandatory diversity courses, including courses through Black studies programs.

Tenet 4: Using Racial Identities to Influence Perspectives About Students

How teachers position their own racial identities and those of their students matters. In fact, teachers' perceptions about the academic and behavioral characteristics of their students affect

academic expectations and quality of instruction (Sparks, 2016). While both White PTs saw their racial difference as a challenge to teaching Black students, during her interview, Genna was particularly concerned that she was just “too different” from her Black students even to build relationships with them. Views about her own racial identity and that of her students significantly impacted her perspectives on teaching and learning with Black students.

Here it is important to recall Genna’s previous view of her Black students as being from “nontraditional homes,” which implied that White students’ homes, and by extension their culture, are traditional and “normal.”

This set up a basic premise of alienation that harmed Genna’s ability to connect with her Black students. Genna explained,

I find that I have much more in common with the White students, who act more like I acted when I was in school even though most of my White students are also Jewish (which I am not). It has been very frustrating for me, because even when I realized that my students did not need to behave like I would have in the same situation, I struggled to set boundaries for them without stepping on toes or getting called a racist. I still feel that I am almost too different from my students to build a relationship with them. My skin color, culture, religion, interests, and many other things are different. I think that Teel (2008) put my feelings into words when she said that she felt more comfortable reprimanding her White students and pushing them to achieve, reinforcing the attitude and approach she thought their parents used. Like Teel (2008), I was confused about the ways the Black students treated each other and was reluctant to seriously reprimand them for fear of becoming even more alienated from them.

Genna’s statement illustrated that her use of difference to prevent relationship building is situated in her desire to maintain her privileged status as a White woman (Tinkler & Tinkler, 2013). Seeing beyond her differences to develop relationships with her students

does not serve any psychic or material interest for Genna. In terms of practice, Genna’s experience with teaching Black students is an example of how teachers chastise Black students for lack of conformity to White norms and standards, making Black students’ actions unsavory, inferior, and undesirable by default (Rector-Aranda, 2016).

Her self-identified paralleled experiences to Teel (2008) made it clear that Genna could only identify with her White students and saw her Black students as uncontrollable and loud. Genna’s explicit preference and comfort in pushing her White students toward success in her mathematics classroom characterizes her Black students as one down compared to her White students.

Genna’s statement aligns with a CRP tenet that racism is normal and prevalent in everyday practices, including school practices, which adhere to a White over Black hierarchy that operates both mentally and materially. In addition, Genna’s frustration with her Black students’ difference in behavior and her fear of upsetting them could cause her to interpret their behavior as insubordination, which accounts for high expulsion and suspension rates of Black students (Gregory et al., 2016). Conceivably, the foundation of Genna’s frustration lies in the question “why can’t the Black children be more like the White children?”

Furthermore, an examination of her fear of being called a racist also suggests that Genna understands that she is the benefactor of a racist system and is fearful of her students’ recognizing her and calling her out as a beneficiary. Genna’s implied concept of inferiority could impact her students’ academic learning. Genna could benefit from preparation aimed at challenging negative views about children and families who behave differently from the dominant culture.

**Tenet 5:
An Awareness of How Structures
Maintain Unequal Access**

School structures, processes, and discourse serve as forces that help shape students’ understanding of the juxtaposition of prison and high-quality education (Marrus, 2015; McCray,

Beachum, & Yawn, 2015; Meiners, 2007; Porter, 2015). These policies and practices can create fundamentally different experiences for historically marginalized students, such as Black children (Jackson & Howard, 2014; Martin, 2012).

The following excerpt demonstrates how Ashley began to recognize that school structures, processes, systems, and practices help to shape her Black students’ academic trajectories:

Disciplinary situations hurt academic success for these students. For example, I have a troubled student. He is always suspended. He was in class one day, working hard, when the officer pulled him out of class and suspended him.

Here Ashley identified and critiqued a school-wide practice that she perceived as limiting her students’ opportunities for academic success. Her comment suggested she was gaining sociocultural consciousness (Daniel, 2016). Ashley’s account and acute awareness of how excessive suspension hinders her students’ opportunities to learn show that teacher educators’ engagement with PTs in critical discussions about race-based disparities and their impact on student learning is still needed.

Facilitating critical discussions with PTs around their practice and the practices they observe from mentors, administrators, students, and other interactions at their practicum sites could prove beneficial and provide PTs with opportunities to build on diverse experiences (Daniel, 2016). Strengthening PTs’ understanding about school structures, processes, and discourse as forces that shape students’ relationships between prison and high-quality education (Marrus, 2015; McCray et al., 2015; Meiners, 2007; Porter, 2015) is critical.

Obsessive punishment of students not only removes students from needed classroom instruction but also impacts teachers’ perceptions of their students’ cognitive abilities to experience success (Fernandes, Ha, McElroy, & Myers, 2016). By engaging in critical discussions with PTs like Ashley, teacher educator programs can begin to challenge teacher preconceptions and formulated impressions of students (Sparks, 2016). Teacher perceptions of students are

pivotal to teacher expectations of students as well as student access, success, identity, and interest in mathematics.

Although Ashley expressed concern for her student's academic success, she also rendered her student as troubled and was astonished by his physical presence in her classroom. PTs' experiences at their school placements influence their perceptions about teaching and students (Frye et al., 2010). Ashley's view of her student could be a start toward holding deficit views of her student due to his high instances of school expulsion and suspension. Toldson and Johns (2016) asserted that when teachers begin to hold deficit views of their students, real consequences emerge and can manifest as barriers to high-quality access and opportunities.

What is happening in Ashley's classroom could be indicative of current school discipline policies that disproportionately target Black students for disciplinary actions (George, 2015). In Ashley's experience lies the potential for teacher educator programs to engage prospective teachers in critical thinking about what they notice, professionally, at practicum sites. Professional noticing (Averill, Anderson, & Drake, 2015) and critiquing of equity-related issues impacting HMCLDS could be a start toward merging PTs' actual experiences at practicum sites with their development of culturally responsive teaching.

Implications

The findings reported in this article strongly suggest that interpersonal and intrapersonal race relationships both inside and outside of classrooms and how the PTs situate themselves racially and culturally affect how students are perceived and taught. Recognition that racial and cultural matters affect education insofar as they relate to the way teachers see difference as an obstacle is important. Thus the main implication from this study for teacher education programs is the need to prepare culturally responsive pedagogues who, through an examination of their own biases, unequivocally support, encourage, and promote learning for diverse students.

Recent studies (e.g., Averill et al., 2015; Jackson, Applegate, Seiler, Sheth,

& Nadolny, 2016) have stressed that teacher preparation programs must change in response to the changing demographics of U.S. schools and become more deliberate in their approach toward engaging PTs in critical pedagogy, such as culturally responsive pedagogy. The present study emphasizes that importance by examining two preservice secondary mathematics teachers' personal stories about their integration and use of culturally responsive pedagogy after being immersed in CRMP professional learning activities. Although the PTs' perceptions cannot be generalized, their comments provide teacher education programs with insights into how to better prepare prospective teachers for diverse classrooms. In line with the study's inquiry, my findings may be applicable to improving learning outcomes for Black children.

Cued by my analysis of this study's data and considering the urgent call to prepare teachers to meet the needs of Black students, I call attention to the growing need for teacher preparation programs to (a) create a culture of learning unafraid of examining PTs' racial and cultural perceptions, (b) begin intentional and deliberate recruitment of diverse pools of PTs, and (c) incorporate mandatory courses on Black studies as part of PTs' preparation. Taking into consideration the findings of this study, I will further elaborate on each of these implications as they relate to teacher preparation programs.

Examination of PTs Racial and Cultural Preconceptions

Implications of the investigation suggest that teacher educator programs need to examine prospective teachers' feelings about, and success with, diverse students through an exploration of the teachers' intersectionality of race, culture, and lived experiences. What was most striking about PTs' comments regarding their Black students in this study was how they explicitly saw their students' differences as deficits and barriers for establishing healthy teacher-student relationships.

Unfortunately, the current national reform agenda focuses on test scores and dominant narratives about mathematics performance of students of color

(Martin, 2012) without much attention given to how racial, cultural, and historic biases inherent in both the U.S. education and social operating systems and teachers of such children impact their learning.

However, findings of this investigation demonstrate how racial and cultural matters do indeed impact teachers' actions and discourses toward students of color. When Genna shared how her skin color, upbringing, interests, religion, and so on were impactful to how she embraced teaching and learning with her Black students, it was not that it differed significantly from other studies focused on teaching and race; rather, it accentuated the conflict PTs face when dealing with racial and cultural difference. Thus teacher education programs must care more directly about race and culture (Nasir, 2016).

Additionally, in examining PTs' racial and cultural preconceptions about HMCLDS, teacher educators need to include a critical examination of PTs' background experiences as part of the preparation before PTs engage with diverse classrooms. These examinations of background experiences can serve to reveal PTs' sociocultural perspectives and potential biases which might influence their teaching philosophy and methodology (Stinson & Powell, 2010).

Research studies (see, e.g., Gay, 2013; Russell & Russell, 2014; Warren, 2013) have suggested that the background experiences, racial and cultural views, and interactions of teachers play an important part in determining how they negotiate the demands of their careers with their professional and personal identities. More specifically, probes into PTs' internalized stereotypes about diverse students, such as Black children, can lead to the discovery of how teachers view the mathematics abilities of their students.

Intentional Recruitment of Diverse PTs

Teacher education programs should intentionally recruit diverse pools of PTs that are more reflective of a diverse student population. In other words, addressing the racial makeup of teacher education programs should become a priority for teacher education programs.

With the continuous change in U.S. demographics that show students of color will be the new majority of students attending U.S. public schools (Maxwell, 2014), teacher educator programs need to become more intentional in their recruitment of PTs of color. Note that the data did not prove that White teachers from homogeneous backgrounds are less suited to teach Black children because of racial and cultural differences. However, the experiences of PTs align well with documented studies (see, e.g., Achinstein & Ogawa, 2012; Villegas & Irvine, 2010) that have asserted that commonalities of race and culture between teachers of color and their students of color impact teaching and learning.

Furthermore, findings of this investigation suggest that when teachers of Black children have a solid sense of the historical educational disadvantages Black children have faced throughout the U.S. education system, and understand how policies, practices, and racial and cultural experiences work to constrict the learning experiences of Black children through cultural biases inherent in curriculum, instruction, and assessment, their appreciation, as we know from other studies (see, e.g., Buchanan, 2015; Clewell et al., 2005; Simic-Muller, Fernandes, & Felton-Koestler, 2015; Villegas & Lucas, 2002, 2004), is reflected in their efforts to be critical empathetic pedagogues.

For many Black children, success in school is often determined by the coupling of teachers' unconscious biases and institutional racism (Ani, 2013; Battey, 2013; Irvine, 1999, 2003; Martin, 2012; Spencer, 2009). Recent data have shown that the current mathematics teaching force is over 86% White, with only 6.4% Black and 6.2% Latinx, in contrast to the changing U.S. demographics in which Black and Latinx children now make up over 50% of the student population (Maxwell, 2014; NCES, 2016). Therefore, in line with the investigation's inquiry, teacher educator programs need to foster an environment where all teachers examine their personal views and representations about diverse students through personal reflections and autobiographies. This practice affords teachers and teacher educators with opportunities to build a community of skilled professionals who possess an awareness

of their own biases and subjectivities that might impact their teaching.

There is a troubling comfort and acceptance within teacher education programs that because of one multicultural education class that is required of teachers, enough is being done to address racial and cultural issues impacting education (Puchner & Markowitz, 2015). However, the findings of this investigation show how much more can and should be done.

Incorporation of Multiple Mandatory Diversity Courses

Teacher preparation programs could begin to include and reflect national standards for mandatory incorporation of courses centered on inclusivity and diversity. Although teacher preparation programs have begun to require students to take diversity courses, which are usually centered on exploring socioculturally diverse perspectives, more could be done to require prospective teachers to focus specifically on Black studies.

For example, both Ashley and Genna could have benefited from Black studies courses that would have assisted with their understanding of and appreciation for the racial and cultural experiences of their Black students rather than seeing their students as coming from nontraditional families who stopped their education at or below high school and were perceived as being uncaring parents.

Incorporation of Black studies courses into teacher preparation could help to combat and address race, racism, stereotypes, and personal biases that negatively impact the teaching and learning of Black children. As part of these courses, teachers should be required to read, interact with, notice, and discuss racial and cultural issues that involve addressing race-based disparities and biases, thereby challenging stereotypes and building awareness of inequities.

More importantly, in addition to including mandatory diversity courses, such as Black studies classes, throughout teacher education programs, it might be fruitful to initiate statewide or nationwide collaborative efforts whereby specific aspects of diversity

and inclusivity practices are explicitly emphasized as necessary in the context of teacher education programs.

For example, given the currently homogeneous teaching force and cultural mismatches between teachers and students, consider the value of teachers being immersed in multicultural education studies, particularly Black studies, as an avenue toward teaching becoming a profession without the boundaries that currently view difference as a deficit. Thus Black studies courses should be valued as national mandatory components of teacher preparation programs designed to prepare culturally responsive pedagogues for all students, particularly HMCLDS such as Black children.

It is appropriate to note that such a collaboration would not be easy due to constraints including, but not limited to, institutional policies. However, deliberate production of culturally responsive and sensitive pedagogues can have a positive ripple effect for many underserved communities within the U.S. and society at large, as it relates to better social outcomes, economic savings, healthier and more productive lives, and fewer incarcerations.

Additionally, preparing prospective teachers to be culturally responsive and sensitive pedagogues could affect teacher attrition rates (Doran, 2014; Glover & Harris, 2016) and lead to more critical and empathetic teaching (Cooper, 2010; Warren, 2013). This would be a valuable and indispensable resource, crucial to the mathematics experiences of historically underserved children, such as Black children.

Limitations

Overall, qualitative studies are limited in their ability to generalize findings (Stake, 2010), and this investigation is no exception. Therefore the results are limited by the context, setting, and participants of this investigation. Moreover, the methods employed by this investigation did not include observations as a data source. Observations of PTs in their classrooms could have afforded the researcher with the opportunity to actually see how PTs interacted with their Black students.

Nevertheless, this investigation focused on the researcher's goal to examine how PTs might negotiate racial and cultural experiences to better educate

underserved students, such as Black children. Future research based on observations in actual classrooms could validate whether PTs' awareness of race and culture influences their teaching and learning experiences with historically marginalized students, such as Black children, during their practicum experiences.

Conclusion

The main goal of many teacher preparation programs across the U.S. is to prepare exemplary practitioners who individually and collectively influence the betterment of society within a culturally diverse and changing environment. In many cases, preparation received from teacher preparation programs serves as an initiation into teaching. Thus teacher preparation processes can provide PTs with opportunities to uncover, understand, and respect racial, social, political, and cultural contributions that speak to the experiences of diverse students (Reyes & Villarreal, 2016).

Considering the study's findings, a rededication and commitment from teacher educators to develop PTs' necessary competencies, through explorations of how dominant views about race and culture permeate PTs' thinking, views, and ultimately what and how they teach (Frye et al., 2010), will benefit diverse student and teacher populations. Such a commitment will help PTs learn how to embrace racial differences and bridge cultural gaps.

Currently the coupling of PTs' perceptions and views of race and culture when teaching mathematics is relatively unexplored. Evaluating the influence teachers' racial and cultural perspectives have on teaching mathematics to diverse students is complex yet necessary to culturally and linguistically diverse students experiencing success in mathematics.

Achinstein and Ogawa (2012) and Pittman (2010) have suggested that teachers' views of race and culture impact what and how they teach. Using CRT as a theoretical framework, future studies may investigate how teachers' perceptions of Black students, based on internalized stereotypes, impact their use of equity pedagogies like CRMP.

Accordingly, teacher education programs should be (more) inclined to embrace ways that disrupt PTs' perceptions about race, culture, and racism. As educators, we all have a role to play, and when we do not recognize the importance of addressing teachers' perceptions and stereotypes about race and culture, the consequence is greater marginalization of culturally diverse students, such as Black children.

It is during the pre-service preparation process that teacher educators need to identify and recognize the racial and cultural backgrounds which their PTs bring with them to the program. Then, through that preparation process, teacher educators must act and respond to the intersectionality of PTs' racial and cultural life experiences to interrupt those experiences which will negatively impact teaching practices if not understood, addressed, and altered.

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