Journal of Urban Mathematics Education
May 2022, Vol. 15, No. 1, pp. 9–30

FIELD DISRUPTIONS AND FIELD CONNECTIONS

Disrupting Research, Theory, and Pedagogy With Critical Race Theory in Mathematics Education for Black Populations

Julius Davis
Bowie State University

As I wrote this article, critical race theory (CRT) came under attack in the public, school systems, and the law. This is not the first time that CRT has been attacked in public. The most recent attack can be traced to Christopher Rufo, a senior fellow at a libertarian think tank known as the Manhattan Institute (Harris, 2021). In 2020, he received a report from a Seattle city employee about race-based training for staff that purportedly condemned White people and created racial divisiveness (Klinghoffer, 2020). Rufo (2020b) wrote about the training in the Manhattan Institute public policy magazine. He discussed how the trainings were being used against White people to provoke supporters of himself and the Manhattan Institute to take action against the trainings. Rufo indicated that this type of training was infecting every part of the city government. He wrote that this type of training was a part of a nationwide movement, but he did not explicitly use the term CRT. His article led informants from school systems and federal agencies around the country to reach out to him to complain about race-based training of which they had firsthand or secondhand knowledge.

Later, Rufo used the term CRT for the first time in an article where he described the concepts of "whiteness," "white fragility," and "white privilege" and how these were spreading rapidly throughout the federal government (Rufo, 2020a). In September 2020, Rufo was invited to Tucker Carlson's show on Fox News and warned that the theory was being weaponized against Americans (code for White people), publicly requesting that President Donald Trump ban CRT trainings in all federal departments. The president heeded his request. Shortly after, Trump signed an executive order banning federal departments' and contractors' use of CRT in trainings. The order was immediately challenged in court, and a federal judge ruled against it. President Joe Biden rescinded the executive order. By the time the order was rescinded, however, CRT had been vilified in the media and became the catchall phrase for any trainings or teaching activities involving race, racism, diversity, equity, inclusion, and so on. Many politicians in state legislatures, the United States House of Representatives, and the United States Senate used Rufo's flawed information to create

JULIUS DAVIS is the University System of Maryland Wilson H. Elkins Associate Professor of Mathematics Education and Founding Director of the Center for Research and Mentoring of Black Male Students and Teachers at Bowie State University, 14000 Jericho Park Road, Proctor Building 233N, Bowie, MD 20715; email: jldavis@bowiestate.edu. His scholarly interests focus on critical race theory in mathematics education, and he conducts research of Black male students and teachers in mathematics education in urban schools.

legislation to ban CRT in school systems and government agencies without a proper understanding of the theory or direct knowledge it was actually being used as propagated.

Critical race theory legislation was intended to scare off and prevent government agencies, school systems, and companies from discussing systemic racism and the adverse educational and societal conditions resulting from it. There has been a push to pass laws banning schools from teaching or providing professional development in CRT. Opponents of CRT have a problem with the theory's foundational stance that racism is a natural fabric of America. Although CRT emerged in the law and education due to widespread discontent with issues of race and racism, it is now being attacked because of mostly White political and parental opposition to discussing and addressing issues of race and racism in schools and classrooms. Droves of White parents have been protesting the perceived use of CRT in schools, classrooms, and with students, creating public and school system uproar over anything that sounds like their views of CRT. Parker and Lynn (2002) warned that "CRT in education will come under the same attack it is facing in the legal arena" (p. 17).

The mathematics education community is familiar with public attacks against our colleagues whose scholarship focuses on race, ethnicity, equity, Whiteness, and other critical topics. In 2017, one of our colleagues, Rochelle Gutiérrez, was publicly attacked by two media organizations, the Campus Reform and Fox News. The media outlets cherrypicked specific phrases from her scholarship to incite the public to condemn her. Gutiérrez was inundated with hundreds of hate-filled emails, voice messages, and social media posts (e.g., Twitter, Facebook). Alt-Right groups produced podcasts and more media to slander Gutiérrez and her scholarship. Interestingly, although Gutiérrez (2017) is one of many mathematics education scholars with critical scholarship that has challenged the status quo over the last fifty years, she nonetheless became a central target for antagonists. Gutiérrez (2017) and Davis and Jett (2019) warned that scholars who seek to challenge the status quo and address issues of race, racism, and White supremacy, or who use CRT, should be mindful that they may be attacked for their critical scholarship.

Like critical scholarship in mathematics education, CRT has been around for fifty years and has been attacked in the public before, mainly in the legal realm. Like the attack on Gutiérrez, the public and legislative attack on CRT is new in education. CRT in law, education, and mathematics education is an established theoretical, methodological, and pedagogical framework that scholars can use to disrupt racism, White supremacy, and generational inequities in education and mathematics education if fully understood and appropriately used (Davis & Jett, 2019). Solórzano and Yosso (2002) argued that CRT in education "is a framework or set of basic insights, perspectives, methods, and pedagogy that seeks to identify, analyze, and transform those structural and cultural aspects of education that maintain subordinate and dominant racial positions in and out the classroom" (p. 25). However, critical race theory

in mathematics education (CRT(ME)) is known to a lesser degree by CRT scholars in education and mathematics education (Davis & Jett, 2019) and the public.

A small number of mathematics educators have used CRT to disrupt and advance research, theory, and pedagogy for Black adults and students. Some scholars have used CRT to promote mathematics and urban education (Davis, 2014; Jett, 2012; Rousseau Anderson & Powell, 2009; Terry, 2011). Given their work, there has been a call to usher in a new generation of scholars to advance CRT(ME) and push the field forward toward greater racial justice for Black adults and students. To fully understand or use CRT(ME), scholars must understand the CRT literature in the law, education, and mathematics education and embrace crossing disciplinary boundaries. Doing so would help mathematics education scholars develop a more robust understanding of CRT's theoretical, methodological, and practical application and minimize its misuse in mathematics education. In this commentary article, I provide a brief overview of my CRT(ME) journey and the origins of CRT in the law and education; examine CRT in law, education, and mathematics education; and conclude with a discussion of how to continue to move CRT(ME) forward in the field.

My CRT(ME) Journey

Over 15 years ago, I entered my mathematics education doctoral program knowing that I wanted to study how race and racism impact Black adults and children in my West Baltimore community, but I did not know how to do it (Davis, 2016). I started by reading literature on racism and Black students' mathematical achievements and experiences. In 2005, the second year of my doctoral program at Morgan State University, I was introduced to CRT in education by a colleague who shared Marvin Lynn's (2004) article, "Inserting the 'Race' into Critical Pedagogy: An Analysis of 'Race-Based Epistemologies.'" I read the article intently and appreciated the fusion of CRT and Afrocentricity. It aligned with my core beliefs and centered race, culture, schooling, and Black education. At the time, Lynn was an urban education faculty member at the University of Maryland, College Park. I asked him to be a member of my dissertation committee, led by mathematics educator Roni Ellington, and he agreed. Since then, they have both been my mentors and, in many regards, have significantly influenced my CRT(ME) scholarship.

Lynn's (2004) article led me to further explore his work and the larger body of CRT in education scholarship, most notably the publications of Gloria Ladson-Billings, William F. Tate IV, and Daniel Solórzano. Tate's CRT and mathematics education scholarship provided me with a necessary foundation to build my CRT(ME) knowledge and understanding (see Tate, 1993, 1997). It taught me the importance of reading and studying legal cases, critical legal studies, and CRT in law and education to fully understand how to use CRT in mathematics education and beyond. At the time, only five studies purported to use CRT to examine Black

students, teachers, and parents in mathematics education (Berry, 2003; Brown, 1999; Corey, 2000; Martin, 2006; Snipes, 1997).

In 2005, I found Robert Berry's (2005) article utilizing CRT to understand Black male middle school students' mathematical experiences. Subsequently, I read Berry's (2003) dissertation, which demonstrated how Black males' and their parents' experiential knowledge was critical to understanding how race and racism impacted their mathematics education through stories that prioritized their voices. His analysis helped me develop a deeper understanding of using CRT to study Black students' experiences in mathematics education in urban schools. Berry's research demonstrated how individual acts of discrimination were connected to institutional racism and how this created barriers for Black male students in mathematics education. His results illustrated how White adults sought to exclude Black students from higher level mathematics courses and gifted education. It became my go-to model for constructing my dissertation as I thought through conceptualizing the theoretical framework, informant narratives, analyzing data through a CRT lens, and developing themes. Berry's use of CRT in his mathematics education scholarship has significantly impacted my understanding and use of the theory.

In 2007, as a doctoral student, I attended the first Critical Race Studies in Education Association (CRSEA) Conference at the University of Illinois at Chicago (UIC). Lynn, a co-founder of the conference, was transitioning into a faculty position at UIC to join forces with other critical race and race critical scholars like Danny Martin, Dave Stovall, and William Watkins. I formally met Danny Martin, another distinguished mathematics education race scholar who impacted my development as a critical Black scholar, at the conference. His scholarship has continuously provided critical perspectives on race, racism, and Whiteness (see Martin, 2006, 2007, 2008). It has ushered in a liberatory paradigm to achieve racial justice for Black adults and children. I collaborated with Martin in 2008 to produce my first publication as a doctoral student, "Racism, Assessment, and Instructional Practices: Implications for Mathematics Teachers of African American Students," in the *Journal of Urban Mathematics Education*. These experiences and others have strengthened my development as a CRT scholar.

I dedicated my doctoral studies to reading and studying legal cases, critical legal studies, and CRT in the law, education, and mathematics education. I completed my dissertation on Black students' lived realities, schooling, and mathematics education in 2010 and have continued to develop my understanding of CRT both within and outside of mathematics education since. After my dissertation, I continued to participate in the CRSEA conference, present my CRT mathematics education scholarship at conferences, publish articles, and read CRT publications (see Allen et al., 2018; Davis, 2014, 2016). As a faculty member, I have supported doctoral candidates that used this framework and methodology in their research across disciplinary boundaries. I have also used CRT to deliver professional development for educators

and leaders like the ones Rufo (2020a, 2020b) demonized while calling for governmental and public outrage, as mentioned in the introduction of this article. I co-edited *Critical Race Theory in Mathematics Education* (2019) with Christopher C. Jett almost ten years after my dissertation. I have used different elements and tenets of CRT in education, research, policy, legal analysis, and practice. It is now a common thread that runs through my scholarship and thinking (Davis, 2019).

Origins of CRT in the Law and Education

Critical race theory emerged out of the critical legal studies (CLS) movement and surrounding discourse. In the late 1970s, scholars developed the CLS movement to reevaluate "the merits of the realist tradition of legal discourse" (Tate, 1997, p. 207). Critical legal studies scholars designed a movement to analyze "legal ideology and discourse as a mechanism that functions to re-create and legitimatize social structures in the United States" (Tate, 1997, p. 207). Although CRT was born out of the CLS movement, it is separate from the earlier CLS movement and discourse (Ladson-Billings, 1999). Critical race theory was a logical outgrowth of discontent with CLS scholars' failure to address racism. Therefore, CRT operates from the presumption that racism is deeply rooted in American society and is perhaps a permanent fixture. In other words, racism has never ceased to exist in American society; it has simply shifted over time from more overt and blatant forms of racism, as seen in old television footage, to more "subtle, hidden, and often insidious forms of racism that operate at a deeper, more systematic level" (Lopez, 2003, p. 70). Racism was seldom contextualized as deeply rooted in the fabric of American institutions (e.g., schools, government, etc.) and connected to inequities or a larger system—where individual acts and institutions function as a system.

During the 1990s, CRT emerged in education because race and racism were untheorized in scholarly inquiry and scholars wanted to bring these issues to the forefront (Ladson-Billings, 1999; Ladson-Billings & Tate, 1995; Tate, 1993). William Tate started using CRT in the field of education in his 1993 article "Advocacy Versus Economics: A Critical Race Analysis of the Proposed National Assessment in Mathematics," where he introduced it to the mathematics education community by exposing the racist underpinnings of standardized testing. Tate joined forces with colleague Gloria Ladson-Billings to formally establish CRT in the field of education, advancing this theoretical framework by connecting race and property rights as an analytic tool for understanding social inequity, educational inequity, and inequity in mathematics education (Ladson-Billings & Tate, 1995). In this article, Ladson-Billings and Tate (1995) illustrated the significance of CRT, not only to the field of education, but to mathematics education, in particular, as well. Ladson-Billings and Tate advanced the notion of intellectual property as a form of property rights and Whiteness as property.

Two years later, Tate (1997) provided a comprehensive description of CRT and its intellectual underpinnings to provide the educational community with a way to understand CRT and its use in education. In 1998, Laurence Parker and colleagues renewed interest in CRT in education with a special issue of the *International Journal of Qualitative Studies in Education*, most of which was later published in a book, *Race Is . . . Race Isn't: Critical Race Theory and Qualitative Studies in Education* (Parker et al., 1999). One of the most notable articles published from this work was Ladson-Billings' article (1998), titled "Just What Is Critical Race Theory and What's It Doing in a Nice Field Like Education?" In this document, Ladson-Billings (1998) argued that CRT could be a powerful tool for understanding inequity that people of color experience through the configuration of education. She critically examined curricula, instruction, assessment, school funding, and desegregation as discussion points to examine culture, White supremacy, racist beliefs about Black students, teaching competencies needed to teach students, and social constructions of race and racism. Simultaneously, in the late 1990s, CRT scholars Solórzano and colleagues advanced scores of theoretical perspectives, methodologies, and empirical investigations into the experiences of Latinos/as and Chicanos/as (see Solórzano, 1997; Solórzano & Solórzano, 1995; Solórzano & Villalpando, 1998; Solórzano & Yosso, 2002). In 2002, Marvin Lynn and associates published a CRT special issue in *Qualitative Inquiry* in which there was discussion of the relationship between theory and method (see Lynn et al, 2002). This special issue employed CRT to examine the impact of race and racism throughout the entire educational pipeline from elementary, middle, and high school to the university. This body of work represents some of the foundational CRT scholarship in education. Since then, scores of CRT in education scholarly publications have been produced. The *Handbook of Critical Race Theory in Education* is a notable advancement of the theory, methodology, and practice (Lynn & Dixson, 2013).

Defining Elements of CRT in Education

Solórzano and Yosso (2002) identified five elements that form the basic insights, perspectives, methodology, and pedagogy of CRT and critical race methodology in education. First, CRT recognizes the centrality and intersectionality of race and racism. This first element recognizes that CRT in education begins with the premise that race and racism are endemic and permanent (Solórzano & Yosso, 2002). Social constructions of race and racism are at the center of a critical race analysis in education. CRT recognizes that social constructions of race provide a basic perspective for understanding what racism is and how racism works. For critical race theorists, social constructions of race are central factors for describing how racism functions in U.S. society, the law, policies, schools, and mathematics settings.

Second, CRT challenges the dominant ideology. Critical race theorists challenge traditional claims of "objectivity, meritocracy, colorblindness, race neutrality, and equal opportunity" (Solórzano & Yosso, 2002, p. 26). Critical race theorists expose these traditional claims as a disguise for White individuals' self-interest, power, and privilege in U.S. society, particularly in law, policies, schools, and mathematics settings (Ladson-Billings, 1999; Solórzano & Yosso, 2002; Tate, 1993). Critical race theorists recognize that these traditional claims have shifted over time. For example, research on race and intelligence (Gould, 1981, 1995; Jensen, 1969) has shifted over time to focus on cognitive abilities (Herrnstein & Murray, 1994) to mathematics ability (Martin, 2007, 2009; Tate, 1993), using statistics and numbers as neutral and objective descriptors of ability and standardized testing as the barometer for measuring ability (Davis & Martin, 2008; Ladson-Billings, 1999; Tate, 1993). Critical race theorists challenge traditional claims that operate to protect White privilege by rejecting notions of neutral research or objective researchers and exposing research informed by deficit theories, beliefs, and assumptions about people of color that silence and distort them.

Third, CRT is committed to social justice. The use of CRT acknowledges a commitment to social justice, liberation, or transformative solutions to racial, gender, and class oppression (Matsuda, 1991; Solórzano & Yosso, 2002). CRT's commitment to social justice seeks to eliminate racism, sexism, and classism and seeks to empower oppressed racial/ethnic groups. CRT recognizes that "multiple layers of oppression and discrimination are met with multiple forms of resistance" (Solórzano & Yosso, 2002, p. 26).

Fourth, CRT centralizes the experiential knowledge and voices of people of color. CRT scholars recognize "that the experiential knowledge of people of color [i]s legitimate, appropriate, and critical to understanding, analyzing, and teaching about racial subordination" and racism (Solórzano & Yosso, 2002, p. 26). CRT scholars use poetry, storytelling, biographies, scenarios, family histories, counterstories, parables, chronicles, narratives, stories, fiction, and revisionist histories to give voice to the experiential knowledge of people of color (Delgado, 1995; Ladson-Billings & Tate, 1995; Solórzano & Yosso, 2002). CRT's voice component "provides a way to communicate the experience[s] and realities of the oppressed" (Ladson-Billings & Tate, 1995, p. 58) to understand the complexities of racism. There are at least three reasons for incorporating the voices of people of color: (1) reality is socially constructed, (2) stories are a powerful tool for shaping mindsets, and (3) stories are instrumental to the development of a common culture of shared understanding and community building (Delgado, 1989; Ladson-Billings, 1999; Ladson-Billings & Tate, 1995). The voices of Black adults and students are needed for a complete analysis of their lived realities, schooling, and mathematics education in urban areas. Their experiential knowledge is gathered from a shared history of ongoing struggles

with oppression and resistance. In urban areas, Black students' lived realities, schooling, and mathematics education continues to be shaped by White supremacy.

Fifth, CRT takes an interdisciplinary approach. CRT scholars use multidisciplinary knowledge, epistemologies, and methodologies to guide and better understand the effects of racism, sexism, and classism on people of color (Solórzano & Yosso, 2002). CRT crosses disciplinary, epistemological, and methodological boundaries by borrowing from several traditions to point out how race and racism shape the experiences of people of color. Critical race theorists insist on analyzing race and racism by placing them in historical, contextual, and contemporary contexts (Solórzano & Yosso, 2002; Tate, 1997). Solórzano and Yosso (2002) acknowledged that these five elements are not new but collectively represent CRT in education and challenge the existing traditional claims of scholarship that seek to mask racism in educational institutions and research.

CRT Theoretical, Methodological, and Practical Elements

Critical race theory offers the mathematics education community many theoretical, methodological, and practical tools to disrupt the field. Scholars have used CRT tools to center race, racism, sexism, classism, and other forms of oppression in research, policy areas, and practice. They also use it to achieve liberatory outcomes for Black populations in mathematics education that disrupt the prevalence of racism, White supremacy, Whiteness, and power. Most of these elements have originated from CRT in the law, and scholars have subsequently applied them to education and mathematics education. The brief description of the CRT elements below provides an overview of its utility to scholars.

The father of CRT, Derrick Bell, created the concept of revisionist history to "reexamine America's historical record, replacing comforting majoritarian interpretations of events with ones that square more accurately with" people of color (Delgado & Stefancic, 2001, p. 20). This theoretical element helps mathematics educators challenge historical accounts and interpretations that support White supremacy and the oppression of people of color.

Intersectionality was originally coined in 1989 by Kimberle Crenshaw to address issues of race and gender for Black women, as well as structural, political, and cultural intersectionality. Over time, intersectionality has emerged as a field of study (Cho et al., 2013). This field consists of (a) an intersectional framework and dynamics, (b) a theoretical and methodological paradigm, and (c) political interventions using an intersectional lens (Cho et al., 2013). Intersectionality provides the mathematics education community with tools to address intersecting issues of race, gender, identity, class, theoretical and methodological analyses, and political activism.

Critical race theorists are discontent with liberalism. CRT's critique of liberalism concentrates on how race and racism are not adequately addressed, how equality

of opportunity is not afforded to all, and how liberals' insistence on incremental change prioritizes individuality and individual rights at the expense of addressing institutional and systemic racism and inequity. These elements create and maintain privilege for Whiteness under the guise of having a level playing field. Liberalism significantly impacts policies, practices, and discourses in education and mathematics settings. "CRT maintains that liberalism actually serves as a key mechanism for sustaining and defending the status quo of white supremacy" (Castagno, 2009, p. 757).

In Cheryl Harris's (1993) seminal work, "Whiteness as Property," she articulates Blackness and Whiteness as property, illustrating the connection between race and property rights. The property functions of Whiteness were based on the idea that possessing white skin was valuable property that only White individuals could possess. Harris (1993) describes four main property functions of Whiteness: (a) rights of dispositions, (b) rights to use and enjoyment, (c) reputation and status property, and (d) the absolute right to exclude. The right of disposition contends that property rights are fully transferable to students who conform to White norms or sanctioned cultural practices in education and mathematics education. The right to use and enjoyment asserts that having white skin allows White individuals to use and enjoy properties of Whiteness academically, mathematically, legally, and socially without question. The status and reputation of schools and programs in education, in general, and mathematics education, specifically, diminish when White people are not associated with these academic activities. The absolute right to exclude is socially constructed as the absence of Blackness in schools, higher level education, and mathematics programs and courses. These property functions provide scholars with tools to understand how Whiteness and Blackness function in mathematics education in multiple settings.

Bell developed the interest convergence principle to explain how progress for Black people is only achieved when their goals converge with the interests and needs of White people (see Bell, 1980). The interest convergence principle hinges on the legal case surrounding *Brown v. Board of Education*—a landmark 1954 Supreme Court case to end state-mandated racial segregation in schools. This principle serves two dual purposes in Bell's scholarship (Tate, 1997). First, it contributes to the intellectual discourse on race in U.S. society, and second, it promotes political activism to achieve racial justice. Interest convergence provides a lens for mathematics educators to become aware of and work to disrupt policies, legislation, and practices designed to meet the interests and needs of White people.

Ladson-Billings and Tate (1995) introduced intellectual property in their seminal article on CRT in education. They underscored the utility of race and property to education and mathematics in their articulation of intellectual property. Intellectual property can be used to understand how "the quality and quantity of the curriculum varies with the 'property values' of the school" (Ladson-Billings & Tate, 1995, p. 54). Property taxes provide the means to understand how "property" or "property

values" are connected to education and mathematics education. The higher the community's property values, the higher the tax base, which is funding used to support schools and mathematics curriculum. In the context of mathematics education, the quality of the mathematics curriculum and availability of college-level or advanced mathematics courses, high-quality mathematics teachers, and resources tends to be better in predominantly White schools and communities with a higher tax assessment. The intellectual property varies based on the socioeconomic status, racial composition, and geographical location of the school and community. Urban schools tend to have poor quality mathematics curriculum, lack college preparatory or advanced mathematics courses, and the real property (e.g., teachers) to support a proper education in mathematics because of their racial composition, tax base, and location. Ladson-Billings and Tate (1995) demonstrated how the quality and quantity of the school and mathematics curriculum and real resources impact Black students' intellectual property and their opportunity to learn high-quality mathematics.

Crenshaw (1988) explained the expansive and restrictive views of equality in antidiscrimination law that helped advance CRT. The expansive view describes equality as an outcome and seeks to use the institutional power of the court and legal system to eradicate racial oppression. The expansive view is cojoined with the restrictive view of equality, which explains equality as a process, minimizes the importance of actual conditions, and seeks to stop future acts of wrongdoing rather than addressing the root cause of the racial injustice or correcting it. In education, Tate (1993) has used Crenshaw's expansive and restrictive views of equality to discuss educational policies and court rulings impacting Black students in mathematics education.

Critical race theorists have developed and advanced critical race methodologies in qualitative, mixed methods, and quantitative approaches. Critical race methodologies seek to accentuate silent or marginalized voices in qualitative data and humanize quantitative data (Solórzano & Yosso, 2002). Critical race methodology is a research approach grounded in CRT that merges theory and method. Critical race mixed methodology combines CRT and mixed methods approaches to expose racism, challenge racialized structures, and advance social justice through research design. Gillborn et al. (2018) explained the theoretical and methodological parameters of QuantCrit as centering racism in quantification, acknowledging numbers are not neutral, critically analyzing deficit-oriented analyses serving White interests, critically evaluating categories that are neither natural nor given, centering the voices and experiential knowledge of people of color as essential to understanding quantitative data, and acknowledging how statistical analyses can play a role in the racial justice struggle. There has been limited use of critical race methodologies in mathematics education. Jett (2019) has called for increased use of critical race methodologies in the field.

Counterstories are also a popular CRT qualitative method that originated in the law, and CRT in education scholars describe counterstories a method of telling "the stories of those people whose experiences were not often told (i.e., those on the margins of society)" (Solórzano & Yosso, 2002, p. 32). Counterstories are tools used for exposing, analyzing, and challenging the master narrative, monovocal and majoritarian stories. There are three general forms of counterstory employed by critical race theorists (Solórzano & Yosso, 2002). The first form of counterstory involves personal stories or narratives that describe an individual's experiences with various forms of racism, classism, and sexism. The second form of counterstory involves other people's stories or narratives that reveal another person's experiences with and responses to racism, classism, and sexism as told in a third-person voice. The third form of counterstory involves composite stories or narratives that draw on various forms of "data" to narrate the racialized, sexualized, and classed experiences of people of color. Terry (2010, 2011) conceptualized and advanced mathematical counterstories as a research and pedagogical tool to better understand the mathematics experiences of Black students.

Yamamoto (1997) urged CRT scholars in the law to engage in critical race praxis that bridges the theoretical constructs to everyday life. He argued for CRT scholars to focus less on theory and more on "anti-subordination practice" (Yamamoto, 1997, p. 873). He described critical race praxis as

> critical, pragmatic, socio-legal analysis with political lawyering and community organizing to practice justice by and for racialized communities. Its central idea is that racial justice requires antisubordination practice. In addition to ideas and ideals, justice is something experienced through practice (Yamamoto, 1997, pp. 829–830).

David Stovall has been one of the leading scholars calling for less critical race theorizing and more critical race praxis in education. Stovall (2004) has advanced critical race praxis by calling for more work on the frontlines of racial issues impacting Black and Latinx populations in educational and community settings.

Critical race pedagogy was explained by Lynn (1999) as "an analysis of racial, ethnic, and gender subordination in education that relies mostly on the perceptions, experiences, and counterhegemonic practices of educators of color" (p. 615). He argued further that "critical race pedagogues are concerned with four general issues: the endemic nature of racism in the United States; the importance of cultural identity; the necessary interaction of race, class, and gender; and the practice of a liberatory pedagogy" (Lynn, 1999, p. 615). Mathematics education scholars have engaged in critical race praxis and critical race pedagogy to a lesser degree. To advance CRT in mathematics educational spaces, scholars can use critical race praxis and critical race pedagogy to disrupt Whiteness, White supremacy, issues of race, class, and gender. Those scholars who decide to take up these issues in the mathematics classroom must be educated and prepared for the political ramifications of the decision. In this

section, I have provided a brief overview of how CRT's theoretical, methodological, and practical elements developed in law and education but have been advanced in the larger field of education, in general, and made connections to mathematics education.

CRT in the Law and Education

Many CRT in education scholars have noted the importance of reading and studying CRT legal literature. Ladson-Billings (1998, 2013) described how she and Tate spent considerable time studying the legal literature and CRT in law scholarship. They learned from and engaged with legal scholars to better understand how the law functions and how CRT could be applied to education before using it in the field (Ladson-Billings, 1998; Tate et al., 1993). Ladson-Billings (1998) stated, "Educational researchers need much more time to study and understand the [CRT] legal literature in which it is situated" (p. 22). During the latter part of the twentieth century, Tate was a leading education researcher publishing CRT in education and mathematics education scholarship. A salient feature of Tate's scholarship is the importance of studying the origins and development of CLS, CRT in law, and education literature (see Tate, 1997). In a published interview, Tate discussed the importance of having a "sound knowledge of United States history, constitutional law, social theory, and its debates, psychology, education, and political institutions prior to engaging with critical race theory" (Davis & Jett, 2019, p. 15).

Academicians developed CRT scholarship in the field of education and mathematics education in the late twentieth century. Ladson-Billings (1998, 2013) has described the early developments of CRT in education, starting with a departmental colloquium, conference presentations, and publications dating back to the early 1990s. The culmination of these scholarly endeavors was Ladson-Billings and Tate's (1995) seminal article, "Toward a Critical Race Theory of Education" in *Teachers College Record*. Then, in 1997, Tate published a comprehensive overview of CRT and its influential components in education. During the same year, Solórzano (1997) began publishing on CRT and developed a scholarship line at the University of California, Los Angeles (UCLA) with other CRT legal scholars. Tate noted that UCLA is a notable institution in the academy to study CRT in law and education, primarily because of the faculty knowledge and understanding of the framework (Davis & Jett, 2019).

In 1998, Ladson-Billings published an article to illustrate CRT's usefulness in education, explaining the framework's defining elements and deterring educational researchers from delving into CRT without adequate grounding in the legal literature. The law and education are intertwined, and education is not a part of the U.S. Constitution but is the state government's responsibility. States enact policies, laws, and regulations that govern education. These early CRT developments in education are significant because they illustrate how education scholars utilized legal scholars and

CRT in law literature to develop the knowledge and understanding needed to apply CRT in an educational context.

Critical race theory in education scholars center race and push the educational community to consider race as more than just a research variable (Lynn & Dixson, 2013). In Ladson-Billings' (2013) view, critical race theorists believe in the normalcy and omnipresence of racism, interest convergence of material determinism, race as a social construct, intersectionality or anti-essentialism, and voice or counternarrative. I would also argue that critical race theorists believe in achieving racial justice, and mathematics education scholars have critiqued social justice approaches in the field that have not adequately addressed racial justice (Larnell et al., 2016). In my view, critical race theorists must work toward liberation by finding solutions to identified problems.

In the early phases of CRT's development in education, Ladson-Billings (1998) recognized that the framework was in its infancy, which meant that scholars needed to exercise caution to ensure the theory was not misused. She later reiterated this point in a book chapter that describes what CRT in education is not (see Ladson-Billings, 2013). She stated that just because a scholar examines race in their work or writes about race and racial issues, this does not make them a critical race theorist. Lynn and Dixson (2013) made similar arguments. They stated,

> Some scholars claim a CRT project simply because their sample may be primarily composed of people of color. Far too often, scholars have invoked CRT in the introductory sections of their paper, never to revisit the theory or even utilize any of its tenets in their analysis. (Lynn & Dixson, 2013, p. 3)

Mathematics education scholars must adhere to this guidance to avoid misusing CRT in the field because it interferes with the framework's continued progress. Many CRT scholars warned of the trivialization and misuse of this framework. They have also advocated using CRT in education to rigorously examine race, racism, classism, sexism, oppression, laws, and policies to achieve liberatory outcomes for Black adults and students (Lynn, 2004, Solórzano & Yosso, 2002; Tate, 1997). I concur with Lynn and Dixson (2013) that "far too many scholars who have an interest in examining race and racism in education misunderstand and misuse CRT" (p. 3). Mathematics education scholars, too, misuse and misunderstand the theory. Some scholars who include CRT in their analyses do so in a superficial way. Overall, we must safeguard CRT(ME) to ensure its proper use in the field (Rousseau Anderson, 2019).

CRT in Mathematics Education

Mathematics education scholars have contributed immensely to the furtherance of CRT in education. Tate and Rousseau Anderson are two notable mathematics education scholars who have played an instrumental role in advancing CRT's prominence in the larger field of education (e.g., Dixson & Rousseau, 2006; Tate, 1997). However, their CRT contributions are not widely known in mathematics education because they did not see their scholarship as directly connected to the field. In an interview, Tate stated, "I do not view my CRT project as a mathematics education project" (Davis & Jett, 2019, p. 12). In the same volume, Rousseau Anderson (2019) indicated,

> I would not describe myself as a mathematics educator who uses critical race theory. Rather, I consider myself a critical race theorist who happens to also be a mathematics educator. While this distinction may seem minor, it is one reason why much of my scholarship on CRT does not focus specifically on mathematics education. (p. 19)

Although their mathematics education knowledge has proven beneficial in their CRT scholarship, it has not been a driving force. Therefore, Christopher C. Jett and I have called for mathematics educators to merge their CRT and disciplinary knowledge for stronger connections to the field and to continue advancing it deliberately.

In our edited book (Davis & Jett, 2019), we described how William F. Tate IV pioneered this theoretical perspective in mathematics education and the broader educational research community. Tate's scholarship is salient because he has continuously connected mathematics education to CRT, even though the discipline was not a part of his CRT conceptualization. For instance, Tate and colleagues (1993) used CRT and his background in mathematics to examine the social problems underlying the *Brown v. Board of Education* decision. When Tate introduced CRT to mathematics education in 1993, scholars did not widely use the theoretical perspective in the discipline or larger education field.

Since CRT's introduction, many mathematics educators have used it, but their scholarship is rarely referenced or connected to the broader CRT discipline, nor is it assembled into a collective volume (Davis & Jett, 2019). In the 1990s, few education researchers focused their work on CRT in education and mathematics education (Rousseau Anderson, 2019). Snipes (1997), Brown (1999), and Corey (2000) are among the few mathematics education researchers who used CRT in the early years. Their research was heavily cited by Ladson-Billings, Tate, and other CRT scholars. In the 21st century, the use of CRT(ME) increased as scholars used it to advance theory, methodology, and pedagogy to disrupt the field and elevate new knowledge of Black adults and students (see, for example, Berry, 2003; Corey, 2000; Davis, 2010; Jett, 2009; McGee, 2009; Terry, 2009; Wilson, 2018). These scholars continued the tradition in mathematics education by using CRT in their dissertation research

to advance the field. They are responsible for bolstering publications in this area (see Berry, 2008; Corey & Bower, 2005; Davis, 2014; Jett, 2019; McGee, 2013; Snipes & Waters, 2005; Terry, 2010, 2011). Beyond dissertation research, mathematics education scholars have used CRT to advance knowledge through journal and book chapter publications. They have challenged deficit views of Black adults and students and increased knowledge of the usefulness of this perspective for Black populations (see Berry et al., 2014; Cobb & Russell, 2015; Larnell et al., 2016; Leonard, 2007, 2009; Leonard et al., 2013; Martin, 2006; Martin et al., 2017; Rousseau Anderson & Powell, 2009; Russell, 2013; Strutchens & Westbrook, 2009; Terry & McGee, 2012).

This body of scholarship represents CRT's growth in mathematics education, but it does not necessarily represent grounding in the CRT legal and education scholarship. The early mathematics education studies were developed alongside CRT as a theoretical and methodological framework (Brown, 1999; Corey, 2000; Snipes, 1997), which suggests that the scholars' understanding of the theory was limited and developed simultaneously. There is limited evidence to indicate whether Snipes, Brown, or Corey extensively read or studied the legal literature, CRT in law, and education literature before using it in mathematics education. These studies often present racism as an emergent construct and neglect its omnipresence in their CRT analysis. Moreover, Brown (1999) often presented large chunks of data with superficial, limited, or no CRT analysis. Part of Brown's CRT analysis limitation is the use of three theoretical frameworks (critical theory, CRT, and culture practice theory) that are presented as analogous with one another. Her CRT analysis was often presented as a rehashing or citing of CRT scholars' writings. Brown's research is an example of how mathematics education scholars must avoid misusing CRT.

In an interview, Tate stated that he observed CRT mapped onto cases involving mathematics education (Davis & Jett, 2019). He questioned the awareness of a definitive article, book, or research program that delineates a CRT(ME) (Davis & Jett, 2019). Tate asserted that he was not aware of an overarching CRT(ME) body of scholarship or an existing collection of CRT(ME) publications (Davis & Jett, 2019). In our edited book *Critical Race Theory in Mathematics Education,* I and Jett (2019) sought to create a volume for the mathematics education community that demarcates this perspective for the field, identifies the full spectrum of literature, charts a path forward, and encourages serious scholars to use it as a theory, methodology, and pedagogy to advance the discipline. We sought to assemble veteran and emerging scholars to promote CRT's future direction in mathematics education. When we created this edited book, we had no idea that CRT in education would come under attack shortly after and impact how mathematics educators use it pedagogically in the classroom.

Critical Race Theory in Mathematics Education (Davis & Jett, 2019) is an edited book that provides insight into how scholars have used this theoretical, methodological, and pedagogical approach in mathematics education. In crafting the book,

we sought the father of CRT(ME), William F. Tate IV, to contribute to the book but learned that his scholarly interest had shifted away from CRT. He viewed his former students as scholars and left it to them to advance CRT further. Notably, Tate considered his former student and prominent CRT scholar Celia Rousseau Anderson the savant to forge CRT(ME) scholarship ahead. In the book, Rousseau Anderson (2019) articulates CRT's intellectual boundaries in mathematics education using the CRT in legal studies scholarship. She explains how CRT could be applied to mathematics education.

As a volume, *Critical Race Theory in Mathematics Education* (Davis & Jett, 2019) builds on extant critical legal studies, CRT in law, education, and mathematics education. It advances new knowledge of CRT and ushers in a new generation of CRT scholars in mathematics education. The expansion of CRT(ME) is crucial because it provides a framework for examining the permanence of race and racism, classism, sexism, and other forms of oppression. CRT provides the methodological, theoretical, pedagogical, and analytical framework to shed light on how race, racism, economics, laws, policies, and other forms of oppression shape the mathematical and social experiences, trajectories of achievement, and professional experiences of Black adults and students. In this book, the contributors posit a historical counterstory; illustrate the use of allegorical storytelling and personal narratives; critique mathematical proficiency, standardized testing, recruitment, and retention of Black mathematics teachers; and present a paradigm of liberatory mathematics education for Black students.

Utilizing CRT to Disrupt and Advance the Field of Mathematics Education

As critical race theorists, we must disrupt Whiteness, White privilege, and White supremacy in legislation, mathematics curriculum, standards, and practice. Scholars have challenged Whiteness, White privilege, and White supremacy in education and mathematics education legislation and noted that the Black community has not benefited from the law (Ladson-Billings, 2006; Martin, 2008). The mathematics curriculum used in classrooms worldwide promotes the idea that White men have been the main contributors to mathematical knowledge (Anderson, 1990). In mathematics education, scholars have illustrated and explained that standards give the illusion of meeting everyone's interests but serve the interest of those in power (i.e., the White community; Apple, 1992). Most of the practices used in mathematics are based on White middle-class norms and culture.

The voices and experiences of the Black community have been historically and contemporarily left out of mathematical spaces, curricula, policy, pedagogical approaches, and intellectual spaces. As critical race theorists, we must continue to center the voices and racialized experiences of Black adults and children to understand

their mathematical experiences better and challenge the status quo. CRT provides the tools to center the voices and experiences of Black learners in the curriculum, theory, research, and practices used in mathematics education.

Critical race theorists in mathematics education must prioritize liberatory and racial justice practices in informal and formal mathematics settings to disrupt race neutrality and racism. In this article, I have described CRT tools that scholars can use to achieve liberatory and racial justice outcomes, but we must decide where to focus our efforts. Are liberatory and racial justice actions going to be focused on policy, both within and outside of school and classroom settings? We must ask ourselves, "Can liberatory and racial justice be achieved in the mathematics education enterprise?" Rousseau Anderson (2019) provided guidance for scholars who seek to utilize CRT(ME) to transform the field. Thus, Jett and I have called for mathematics educators to first develop the proper understanding of CRT(ME) to use it properly. Rousseau Anderson (2019) indicated that CRT scholarship involves both action in and reflection on mathematics education. She asked several critical questions to move CRT forward in mathematics education:

> What is the goal of utilizing CRT in mathematics education?
> How will we measure the success of CRT?
> Who is our primary constituency?
> Should we think of ourselves first and foremost as academics or advocates?
> Essentially, where are we going? (Rousseau Anderson, 2019, pp. 29).

More importantly, Rousseau Anderson (2019) insisted that "our students are paying a heavy racial tax in schools every day. What are we doing to alleviate that burden?" (p. 29). As a mathematics education community that values racial justice, I submit that we must continue to grapple with and answer these questions individually and collectively in our CRT(ME) work.

Although many mathematics educators have used CRT, there is still more work to be done to fully utilize this theoretical, methodological, pedagogical, and analytical framework (Berry, 2008; Davis, 2014; Jett, 2011; McGee & Martin, 2011; Terry & McGee, 2012). I assert that all scholars should not use CRT(ME). It should be used by those who have (a) an operationalized definition of race and racism; (b) access to the critical perspectives of Black adults' and children's lived realities, schooling, and mathematics education; (c) the sociohistorical context to analyze race and racism; and (d) a sociopolitical perspective (Davis, 2019). If mathematics education scholars are to use CRT effectively, they must be prepared for possible backlash and fully commit to studying it and achieving racial justice and liberation for Black adults and students in the field.

References

Allen, K. M., Davis, J., Garraway, R. L., & Burt, J. M. (2018). Every student succeeds (except for Black males) act. *Teachers College Record*, *120*(13), 1–20. https://doi.org/10.1177%2F016146811812001303

Anderson, S. E. (1990). Worldmath curriculum: Fighting Eurocentrism in mathematics. *The Journal of Negro Education*, *59*(3), 348–359.

Apple, M. W. (1992). Do the standards go far enough? Power, policy, and practice in mathematics education. *Journal for Research in Mathematics Education*, *23*(5), 412–431.

Bell, D. A., Jr. (1980). Brown v. Board of Education and the interest-convergence dilemma. *Harvard Law Review*, *93*(3), 518–533.

Berry, R. Q., III. (2003). *Voices of African American male students: A portrait of successful middle school students* [Unpublished doctoral dissertation]. University of North Carolina at Chapel Hill.

Berry, R. Q., III. (2005). Voices of success: Descriptive portraits of two successful African American male middle school mathematics students. *Journal of African American Studies*, *8*(4), 46–62. http://doi.org/10.1007/s12111-005-1003-y

Berry, R. Q., III. (2008). Access to upper-level mathematics: The stories of successful African American middle school boys. *Journal for Research in Mathematics Education*, *39*(5), 464–488.

Berry, R. Q., III, Ellis, M., & Hughes, S. (2014). Examining a history of failed reforms and recent stories of success: Mathematics education and Black learners of mathematics in the United States. *Race Ethnicity and Education*, *17*(4), 540–568. https://doi.org/10.1080/13613324.2013.818534

Brown, S. Y. (1999). *A journey into the problematic terrain of African American students and school mathematics* [Unpublished doctoral dissertation]. The Ohio State University.

Castagno, A. E. (2009). Commonsense understandings of equality and social change: A critical race theory analysis of liberalism at Spruce Middle School. *International Journal of Qualitative Studies in Education, 22*(6), 755–768.

Cho, S., Crenshaw, K. W., & McCall, L. (2013). Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs*, *38*(4), 785–810.

Cobb, F., & Russell, N. M. (2015). Meritocracy or complexity: Problematizing racial disparities in mathematics assessment within the context of curricular structures, practices, and discourse. *Journal of Education Policy*, *30*(5), 631–649. https://doi.org/10.1080/02680939.2014.983551

Corey, D. L. (2000). *An African American male student learning mathematics in a web-based environment: How the absence of traditional classroom cultural differences affects his learning* [Unpublished doctoral dissertation]. Florida State University.

Corey, D. L., & Bower, B. L. (2005). The experiences of an African American male learning mathematics in the traditional and the online classroom—A case study. *The Journal of Negro Education*, *74*(4), 321–331.

Crenshaw, K. W. (1988). Race, reform, and retrenchment: Transformation and legitimation in anti-discrimination law. *Harvard Law Review*, *101*, 1331–1387.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, *1989*(1), 139–167.

Davis, J. (2010). *A critical ethnography of Black middle school students' lived realities and mathematics education* [Unpublished doctoral dissertation]. Morgan State University.

Davis, J. (2014). The mathematical experiences of Black males in a predominantly Black urban middle school and community. *International Journal of Education in Mathematics, Science and Technology*, *2*(3), 206–222.

Davis, J. (2016). Free to conduct research of race and racism in my West Baltimore community. In R. T. Palmer, L. J. Walker, R.B. Goings, C. Troy, C. T. Gipson, & F. Commodore (Eds.), *Graduate education at historically Black colleges and universities (HBCUs)* (pp. 79–89). Routledge.

Davis, J. (2019). Using critical race theory as a pedagogical, theoretical, methodological, and analytical tool in mathematics education for Black students in urban areas. In J. Davis & C.C. Jett (Eds.), *Critical race theory in mathematics education* (pp. 183–205). Routledge.

Davis, J., & Jett, C. C. (Eds.). (2019). *Critical race theory in mathematics education*. Routledge.

Davis, J., & Martin, D. B. (2008). Racism, assessment, and instructional practices: Implications for mathematics teachers of African American students. *Journal of Urban Mathematics Education*, *1*(1), 10–34. https://doi.org/10.21423/jume-v1i1a14

Delgado, R. (1989). Storytelling for oppositionists and others: A plea for narrative. *Michigan Law Review*, *87*(8), 2411–2441.

Delgado, R. (Ed.). (1995). *Critical race theory: The cutting edge.* Temple University Press.

Delgado, R., & Stefancic, J. (2001). *Critical race theory: An introduction.* NYU Press.

Dixson, A. D., & Rousseau, C. K. (Eds.). (2006). *Critical race theory in education: All God's children got a song.* Routledge.

Gillborn, D., Warmington, P., & Demack, S. (2018). QuantCrit: Education, policy, 'Big Data' and principles for a critical race theory of statistics. *Race Ethnicity and Education*, *21*(2), 158–179. https://doi.org/10.1080/13613324.2017.1377417

Gould, S. J. (1981). *The mismeasure of man*. W. W. Norton & Company.

Gould, S. J. (1995). Curveball. In S. Fraser (Ed.), *The bell curve wars: Race, intelligence, and the future of America* (pp. 11–22). BasicBooks.

Gutiérrez, R. (2017). Why mathematics (education) was late to the backlash party: The need for a revolution. *Journal of Urban Mathematics Education*, *10*(2), 8–24. https://doi.org/10.21423/jume-v10i2a347

Harris, A. (2021, May 7). The GOP's 'critical race theory' obsession. *The Atlantic,* https://www.theatlantic.com/politics/archive/2021/05/gops-critical-race-theory-fixation-explained/618828/

Harris, C. (1993). Whiteness as property. *Harvard Law Review*, *106*(8), 1707–1791.

Herrnstein, R. J., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life*. The Free Press.

Jensen, A. R. (1969). How much can we boost IQ and scholastic achievement? *Harvard Educational Review, 39,* 1–123.

Jett, C. C. (2009). *African American men and college mathematics: Gaining access and attaining success* [Unpublished doctoral dissertation]. Georgia State University.

Jett, C. C. (2011). "I once was lost, but now am found": The mathematics journey of an African American male mathematics doctoral student. *Journal of Black Studies*, *42*(7), 1125–1147.

Jett, C. C. (2012). Critical race theory interwoven with mathematics education research. *Journal of Urban Mathematics Education*, *5*(1), 21–30. https://doi.org/10.21423/jume-v5i1a163

Jett, C. C. (2019). Mathematical persistence among four African American male graduate students: A critical race analysis of their experiences. *Journal for Research in Mathematics Education*, *50*(3), 311–340. https://doi.org/10.5951/jresematheduc.50.3.0311

Klinghoffer, D. (2020, July 7). White fragility—A free pass for scientists? *Evolution News & Science Today*. https://evolutionnews.org/2020/07/white-fragility-a-free-pass-for-scientists/

Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, *11*(1), 7–24. https://doi.org/10.1080/095183998236863

Ladson-Billings, G. J. (1999). Chapter 7: Preparing teachers for diverse student populations: A critical race theory perspective. *Review of Research in Education*, *24*(1), 211–247. https://doi.org/10.3102%2F0091732X024001211

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U.S. schools. *Educational Researcher*, *35*(7), 3–12.

Ladson-Billings, G. (2013). Critical race theory—What it is not! In M. Lynn & A.D. Dixson (Eds.), *Handbook of critical race theory in education* (pp. 34–47). Routledge.

Ladson-Billings, G., & Tate, W. F. (1995). Towards a critical race theory of education. *Teachers College Record*, *97*(1), 47–68.

Larnell, G. V., Bullock, E. C., & Jett, C. C. (2016). Rethinking teaching and learning mathematics for social justice from a critical race perspective. *Journal of Education*, *196*(1), 19–29.

Leonard, J. (2007). *Culturally specific pedagogy in the mathematics classroom: Strategies for teachers and students.* Routledge.

Leonard, J. (2009). "Still not saved": The power of mathematics to liberate the oppressed. In D. B. Martin (Ed.), *Mathematics teaching, learning, and liberation in the lives of Black children* (pp. 304–330). Routledge.

Leonard, J., McKee, M., & Williams, Y. M. (2013). Not "waiting for superman": Policy implications for Black children attending public schools. In J. Leonard & D. B. Martin (Eds.), *The brilliance of Black children in mathematics: Beyond the numbers and toward new discourse* (pp. 95–119). Information Age Publishing.

Lopez, G. R. (2003). The (racially neutral) politics of education: A critical race theory perspective. *Educational Administration Quarterly*, *39*(1), 68–94. https://doi.org/10.1177%2F0013161X02239761

Lynn, M. (1999). Toward a critical race pedagogy: A research note. *Urban Education*, *33*(5), 606–626. https://doi.org/10.1177%2F0042085999335004

Lynn, M. (2004). Inserting the 'race' into critical pedagogy: An analysis of 'race-based epistemologies.' *Educational Philosophy and Theory*, *36*(2), 153–165.

Lynn, M., & Dixson, A. D. (Eds.). (2013). *Handbook of critical race theory in education*. Routledge.

Lynn, M., Yosso, T. J., Solórzano, D. G., & Parker, L. (2002). Critical race theory and education: Qualitative research in the new millennium. *Qualitative Inquiry*, *8*(1), 3–6.

Martin, D. B. (2006). Mathematics learning and participation as racialized forms of experience: African American parents speak on the struggle for mathematics literacy. *Mathematical Thinking and Learning*, *8*(3), 197–229.

Martin, D. B. (2007). Beyond missionaries or cannibals: Who should teach mathematics to African American children? *The High School Journal*, *91*(1), 6–28.

Martin, D. B. (2008). E(race)ing race from a national conversation on mathematics teaching and learning: The national mathematics advisory panel as White institutional space. *The Mathematics Enthusiast*, *5*(2&3), 387–398.

Martin, D. B. (2009). Researching race in mathematics education. *Teachers College Record*, *111*(2), 295–338.

Martin, D. B., Rousseau Anderson, C., & Shah, N. (2017). Race and mathematics education. In J. Cai (Ed.), *Compendium for research in mathematics education* (pp. 607–636). National Council of Teachers of Mathematics.

Matsuda, M. J. (1991). Voices of America: Accent, antidiscrimination law, and a jurisprudence for the last reconstruction. *Yale Law Journal*, *100*, 1329–1407.

McGee, E. O. (2009). *Race, identity, and resilience: Black college students negotiating success in mathematics and engineering* [Unpublished doctoral dissertation]. University of Illinois at Chicago.

McGee, E. O. (2013). Growing up Black and brilliant: Narratives of two mathematically high-achieving college students. In J. Leonard & D.B. Martin (Eds.), *The brilliance of Black children in mathematics: Beyond the numbers and toward new discourse* (pp. 247–272). Information Age Publishing.

McGee, E. O., & Martin, D. B. (2011). "You would not believe what I have to go through to prove my intellectual value!" Stereotype management among academically successful Black mathematics and engineering students. *American Educational Research Journal*, *48*(6), 1347–1389. https://doi.org/10.3102%2F0002831211423972

Parker, L., Deyhle, D., & Villenas, S. (Eds.). (1999). *Race is … Race isn't: Critical race theory and qualitative studies in education*. Routledge.

Parker, L., & Lynn, M. (2002). What's race got to do with it? Critical race theory's conflicts with and connections to qualitative research methodology and epistemology. *Qualitative Inquiry*, *8*(1), 7–22. https://doi.org/10.1177%2F107780040200800102

Rousseau Anderson, C. (2019). "Critical what what?" Critical race theory and mathematics education. In J. Davis & C.C. Jett (Eds.), *Critical race theory in mathematics education* (pp. 18–31). Routledge.

Rousseau Anderson, C., & Powell, A. (2009). A metropolitan perspective on mathematics education: Lessons learned from a "rural" school district. *Journal of Urban Mathematics Education*, *2*(1), 5–21. https://doi.org/10.21423/jume-v2i1a34

Rufo, C. F. (2020a, July 16). Obscene federal 'diversity training' scam prospers—even under Trump. *New York Post*. https://nypost.com/2020/07/16/obscene-federal-diversity-training-scam-prospers-even-under-trump/

Rufo, C. F. (2020b, July 18). "White fragility" comes to Washington: Profiteering race theorists expand their footprint in the federal bureaucracy. *City Journal*. https://www.city-journal.org/white-fragility-comes-to-washington

Russell, N. (2013). Unpacking brilliance: A new discourse for Black students and successful mathematics achievement. In J. Leonard & D. B. Martin (Eds.), *The brilliance of Black children in mathematics: Beyond the numbers and toward new discourse* (pp. 295–319). Information Age Publishing.

Snipes, V. (1997). *Examination of the mathematical education of African Americans in North Carolina and Louisiana utilizing critical race theory of education* [Unpublished doctoral dissertation]. Florida State University.

Snipes, V. T., & Waters, R. D. (2005). The mathematics education of African Americans in North Carolina: From the Brown decision to No Child Left Behind. *Negro Educational Review*, *56*(2/3), 107–126.

Solórzano, D. G. (1997). Images and words that wound: Critical race theory, racial stereotyping, and teacher education. *Teacher Education Quarterly*, *24*(3), 5–19.

Solórzano, D., & Solórzano, R. (1995). The Chicano educational experience: A framework for effective schools in Chicano communities. *Educational Policy*, *9*(3), 293–314.

Solórzano, D., & Villalpando, O. (1998). Critical race theory: Marginality and the experience of students of color in higher education. In C. Torres & T. Mitchell (Eds.), *Sociology of education: Emerging perspectives* (pp. 211–224). State University of New York Press.

Solórzano, D. G., & Yosso, T. J. (2002). Critical race methodology: Counter-storytelling as an analytical framework for educational research. *Qualitative Inquiry*, *8*(1), 23–44. https://doi.org/10.1177%2F107780040200800103

Stovall, D. (2004). School leader as negotiator: Critical race theory, praxis, and the creation of productive space. *Multicultural Education*, *12*(2), 8–12.

Strutchens, M., & Westbrook, S. K. (2009). Opportunities to learn geometry: Listening to the voices of three African American high school students. In D. B. Martin (Ed.), *Mathematics teaching, learning, and liberation in the lives of Black children* (pp. 249–264). Routledge.

Tate, W. F., IV. (1993). Advocacy versus economics: A critical race analysis of the proposed national assessment in mathematics. *Thresholds in Education*, *19*(1–2), 16–22.

Tate, W. F., IV. (1997). Critical race theory and education: History, theory, and implications. In M. Apple (Ed.), *Review of Research in Education* (pp. 195–247). American Educational Research Association.

Tate, W. F., IV, Ladson-Billings, G., & Grant, C. (1993). The Brown decision revisited: Mathematizing social problems. *Educational Policy*, *7*(3), 255–275. https://doi.org/10.1177%2F0895904893007003002

Terry, C. L. (2009). *An exploration of the impact of critical math literacies and alternative schooling spaces on the identity development of high school-aged Black males in South Los Angele*s [Unpublished doctoral dissertation]. University of California.

Terry, C. L. (2010). Prisons, pipelines, and the president: Developing critical math literacy through participatory action research. *Journal of African American Males in Education*, *1*(2), 73–104.

Terry, C. L. (2011). Mathematical counterstory and African American male students: Urban mathematics education from a critical race theory perspective. *Journal of Urban Mathematics Education*, *4*(1), 23–49. https://doi.org/10.21423/jume-v4i1a98

Terry, C. L., & McGee, E. O. (2012). "I've come too far, I've worked too hard": Reinforcement of support structures among Black male mathematics students. *Journal of Mathematics Education at Teachers College*, *3*(2), 73–85.

Wilson, J. A. (2018). *"Ain't I a woman?": Black women negotiate and resist systemic oppression in undergraduate engineering and mathematics disciplines* [Unpublished doctoral dissertation]. University of South Florida.

Yamamoto, E. K. (1997). Critical race praxis: Race theory and political lawyering practice in post-civil rights America. *Michigan Law Review*, *95*(4), 821–900.
