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Preparing Teachers for Culturally Responsive/Relevant Pedagogy (CRP): A Critical Review of Research

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Abstract

Context: Proposed more than two decades ago, culturally relevant/responsive teaching or pedagogy (CRP) is one promising approach to transform education experiences of historically marginalized groups. The development of CRP has since inspired changes in teacher education programs and resulted in considerable research on preparing teachers for CRP. However, critics have argued that much work on CRP has not fulfilled its transformative potential of addressing racism and the white-supremacist foundations underlying teacher education research and practice, and have urged CRP research to grow from the existing knowledge base and to innovate.

Purpose of Study: This study critically examines the research practices of empirical studies on preparing K-12 pre-service teachers for CRP in the United States by merging ideas of research as social practice with critical race theory, critical whiteness studies, and Indigenous epistemologies to argue for research as racialized social practice. The goal is to provide perspectives and lines of research that are true to the radical shifts the original theories called for, yet might not have been fully fulfilled.

Research Design: This critical literature review applies the research-as-racialized-social-practice lens to examine how CRP research studies frame problems and research questions, elaborate theoretical frameworks and research methodology, and discuss findings and implications. Our analysis positions CRP research

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on the research-as-racialized-social-practice continuum, ranging from maintaining the racist status quo to intentionally disrupting it.

Findings: Our analysis reveals that dominant research practices—emphasizing the problem of individual deficiencies rather than inequitable systems, employing a research logic focusing on linearity rather than complexity, and lacking in-depth examination of racialized and cultural ways of knowing for both researchers and participants—maintain the inequitable status quo rather than disrupting taken-for-granted assumptions and practices. While we recognize the important work and useful knowledge accumulated by this body of literature over two decades, we urge teacher educators and researchers to stay vigilant and resist research epistemologies and practices that recenter, recycle, and maintain whiteness, perpetuating the racist status quo.

Conclusions: We recommend that teacher education researchers can construct research questions capable of generating new knowledge to disrupt racial injustice; utilize and further develop critical theoretical frameworks that sufficiently attend to various aspects of race and racism in teaching, learning, and society, and are meaningfully linked to disruptive research methodologies; and, finally, attend clearly to the ability of research to disrupt the racist status quo within their findings and implications.

In this analysis of teacher education research on preparing teachers for culturally relevant/responsive teaching and pedagogy (CRP), we employ a lens of research as racialized social practice to critically interrogate and identify patterns in the research framing, theoretical frameworks, methodologies, and findings of 134 studies. First, we explore CRP and our own positionality as researchers, and then we define our theoretical framework, bringing together notion of research as social practice (Herndl & Nahrwold, 2000), critical race theory (CRT; e.g., Ladson-Billings & Tate, 1995), critical whiteness studies (e.g., Matias, 2016), and Indigenous epistemologies (e.g., Darder, 2019) to construct a lens of research as *racialized* social practice. We then define the methods of this study and share our findings, focusing on two clusters of studies and illustrating how they fall on a continuum of research as racialized social practice— from reifying the status quo to disrupting it. Finally, we discuss the implications from our analysis by suggesting three important areas of focus for teacher education researchers striving to disrupt inequity and move toward racial justice.

Culturally Relevant/Responsive Teaching or Pedagogy: A Brief Overview

Proposed more than two decades ago, CRP is one promising approach to address educational challenges and transform education experiences of historically marginalized groups (Castagno & Brayboy 2008; Gay, 2000; Ladson-Billings, 1995; Villegas & Lucas, 2002). CRP centers the culture and language of students as resources and assets for learning and teaching. Grounded in the assumption that teaching is inherently complex, value-laden, and never detached from sociopolitical contexts, CRP is both practical and political. Culturally responsive teachers not only encourage academic success and cultural competence in students but also develop their capacity to critically examine social inequalities, challenge the status quo, and take action against social injustice. Studies suggest that both White teachers and teachers of Color need well-designed pre-service preparation to work with diverse student populations even though they might present different levels of commitment to serving students from diverse backgrounds equitably and confronting racism and other forms of institutional oppression (Picower, 2009; Sleeter, 2001, 2008).

In the decades since the development of CRP, there has been significant progress in teacher preparation programs (TPPs) designed to prepare culturally responsive teachers. There has also been considerable research on the effect of programs—or specific components therein—designed to prepare teachers to teach diverse students (Cochran-Smith & Villegas, 2016). However, some scholars have argued that much of the CRP discussion did not recognize and challenge systemic oppression and inequitable school and classroom practices, reducing CRP to cultural celebrations and procedures without sustaining the cultural and linguistic heritage of minoritized students (e.g., Castagno & Brayboy 2008; Paris, 2012; Sleeter, 2012). Several critics have noted that multicultural education, CRP, and even social justice teaching started as radical concepts in education, introduced by scholars of Color, but have not reached their transformative potential because whiteness and white supremacy have been insufficiently addressed (Matias, 2020; Picower, 2021; Sleeter, 2017). Similarly, some scholars have pointed out the failure to grapple with race and racism in teacher education and CRP research (Brown, 2014; Milner, 2017).

In line with the aforementioned critiques, Paris (2012) has argued that the terms “relevant” and “responsive” might not go far enough to ensure the maintenance of a multilingual, multiethnic, and multi-racial society. He has argued for culturally sustaining pedagogy (CSP) as a new stance to center and sustain language and cultural pluralism within the democratic project of schooling. To further conceptualize CSP, Alim et al. (2020) have elaborated their generative “loving critiques” of asset-based pedagogies such as CRP and proposed six principles of CSP: (1) decentering the white gaze, (2) recognizing culture as complex and evolving, (3) engaging in loving critiques and critical reflexivity, (4) sustaining and revitalizing toward socially just and pluralistic societies, (5) taking a desire-based approach to teaching and learning, and (6) sustaining lives and reviving souls. Their six principles centered on the first principle and aim of decentering the white gaze, defined as “white supremacist, settler, capitalist, cisheteropatriarchal/transmisogynistic/misogynoir, ableist and other hegemonic gazes” (p. 269). As both a conceptual and an empirical project, CSP calls for the field to move forward through innovating and reimagining pedagogies that critically center the practices and knowledge of marginalized communities.

Our review is inspired by this movement to decenter the white gaze and by Dixson and Ladson-Billings’s (2017) call to grow from the existing knowledge base for CRP and to innovate. We do so by critically examining the research practices of empirical studies on preparing K–12 pre-service teachers (PSTs) for CRP in the United States through merging ideas of research as social practice with CRT, critical whiteness studies, and Indigenous epistemologies to argue for research as *racialized* social practice. Recent systematic reviews have examined the connection between culturally responsive education and student outcomes across content areas (Aronson & Laughter, 2016), and the characteristics, quality, and effectiveness of in-service CRP interventions (Bottiani et al., 2018). This article does not provide a comprehensive synthesis of knowledge in the field by describing the different features or appraising the merit of certain programs, for much research has undertaken these tasks and offered insightful suggestions (Ladson-Billings, 1999; Sleeter, 2001, 2008). Rather, this article offers a critical lens on the field for the purposes

of identifying and reflecting on research practices that fall short of creating the radical shifts that the theories originally call for, as well as providing perspectives, innovations, and directions of research (Dixson & Ladson-Billings, 2017; Howard & Rodriguez-Scheel, 2017) that can help move the field toward the six CSP principles in teacher education and research.

Positionality

We examined the research landscape by describing, analyzing, and critiquing major trends and issues in the field while attending to our own positionality (see Lather, 1999). My (first author) identity and scholarship have been shaped by my lived experiences as a female Asian bilingual foreign-status scholar from a middle-class family, working with marginalized communities in Asia, along with my racialized and gendered educational and professional experiences in mainly U.S. higher education institutions. Although I have never taught in K–12 schools, I work closely with teachers and teacher educators through teaching and research. Because of my background, I am inspired by the work of CRP with a commitment to equity and justice, and I aspire to live and teach by these principles. When I had the opportunity to apply the theories of CRP in a research methods class, I encountered uncertainties and fear requiring reflection and resolution. I constantly battle with my own practices and question how my identity might enable or mask my instructional approaches. My struggle to enact CRP informed the perspective of this review.

I (second author) am also female, multilingual, and from a middle-class family, and have worked with a wide range of communities, from minoritized to majoritized in varied spaces; but I am also White and raised in the United States, and have a racialized and gendered identity that is in constant disruption and re-creation based on my ongoing learning and efforts to be racially just and anti-oppressive. Transitioning from a childhood where I was taught to be race-evasive to a professional existence as a teacher educator and educational researcher who strives to disrupt oppressive systems, my personal and professional life has been greatly altered and enhanced by understanding and applying the principles of CRT.

Research as Racialized Social Practice

Herndl and Nahrwold (2000) propose a theoretical model that organizes researchers' practices according to their relationships to institutional and cultural power, rather than paradigmatic positions. They argue that researchers are social actors in knowledge production and that research practices are simultaneously regulated by traditions, expectations, and dominant discourses within broader social, historical, economic, and political contexts, while also being open to variations, errors, and counter-narratives born of researchers' commitments and social experiences. They propose a continuum to conceptualize research practices: On one end, research maintains existing social and power relations, and on the other end, research challenges these relations. Research that falls in the center of the continuum seeks to improve practices and support theory building but lacks an overt intention to examine and critique the institutionalized conditions and ideologies that maintain power hierarchies.

Applying Herndl and Nahrwold's work (2000), Cochran-Smith and Villegas (2016) proposed conceptualizing teacher education research as situated social practice. They argued that this framework is particularly useful for examining how the highly contested field of teacher education research shapes and is shaped by major social, political, and economic forces that influence researchers' engagement in various research practices. However, given our focus on CRP and its theoretical commitment to disrupting racial inequity, we link Herndl and Nahrwold's conceptualization of research as a social practice to CRT, critical whiteness studies, and Indigenous epistemologies to construct an analytical lens of research as a *racialized* social practice.

CRT, emerging from the critical legal studies movement in the 1970s, is a race-centered attempt to understand oppression in order to generate societal and individual transformation (Bell, 1980; Matsuda et al., 1993). Later applied to education (e.g., Ladson-Billings & Tate, 1995; Taylor et al., 2009) and teacher education (e.g., Han & Laughter, 2019; Ladson-Billings, 1999; Sleeter, 2017), CRT serves as a framework to identify and challenge cultural and structural aspects that maintain subordination and domination within institutions and to transform racism in policies, research, and practices (Milner, 2008; Milner & Howard, 2013; Sleeter, 2017). CRT asserts

that our current and historical policies, practices, and institutions continue to perpetuate a racist status quo, in part due to the impacts of decisions and behaviors from policy actors at various levels; these include policy makers outside the classroom, as well as teachers and teacher educators in classrooms. From this perspective, research is always an essentially racialized social practice because race is endemic and central to all social processes, including teaching and learning.

Whereas CRT centralizes race and fundamentally situates all research as racialized social practice, critical whiteness studies provides tools to further investigate in what ways research, particularly in teacher education, is a racialized social practice (Picower, 2021). Matias and Mackey (2016) argued that the value of critical whiteness studies lies in its transdisciplinary approach that examines how whiteness is “manifested, exerted, defined, recycled, transmitted, and maintained, and how it ultimately impacts the state of race relations” (p. 32). Such work has long been done, specifically in teacher education, and illustrates a variety of issues centered on whiteness in teacher preparation research and practice (e.g., Fylkesnes, 2018; Matias, 2016; Picower, 2021; Sleeter, 2001, 2017). It is therefore important for examinations of research as racialized social practice to pay particular attention to whiteness in both its reifications and manifestations, as well as how it can be disrupted and decentered.

Finally, Indigenous epistemologies have long focused on the interconnected nature of all things human and beyond (Deloria, 1970; Kimmerer, 2013; Simpson, 2017). In suggesting research as racialized social practice, such understandings of the interconnected nature of knowledge, experience, land, pedagogy, and spirituality (Darder, 2019) provide important tools to honor and situate knowledge as relational, expansive, intimate, grounded, varied, and necessarily community-centric (Alim et al., 2020). Essentially, Indigenous epistemologies offer a complex way of knowing and constructing knowledge that is fundamentally different from the typical Western research logic, which assumes linearity and clear-cut boundaries. Indigenous scholars offer an important perspective for understanding research as racialized social practice, with the aim of disrupting common assumptions and practices regarding knowledge and embracing more expansive, equitable, and complex understandings.

Applying these perspectives, we analyzed existing literature from the standpoint of research as racialized social practice. Specifically, we investigated how race and racism are endemic and ingrained in teacher education policies, ideas, and practices (Milner, 2008; Sleeter, 2017). We also viewed research as systems of knowing and constructing knowledge (Darder, 2019; Scheurich & Young, 1997). Because researchers are social actors situated within the system, their racialized, gendered, and linguistic experiences influence their knowledge production, which in turn shapes (i.e., resists, describes, or maintains) mainstream knowledge. Furthermore, we critically centered the experiential knowledges of historically marginalized communities as counter-narratives to challenge the dominant knowledge and knowledge production that sustain whiteness in teacher education research and to open up possibilities of inquiries from the margins.

As illustrated in **Figure 1**, we use this framework to examine how CRP research studies frame problems and research questions, elaborate theoretical frameworks and research methodology, and discuss

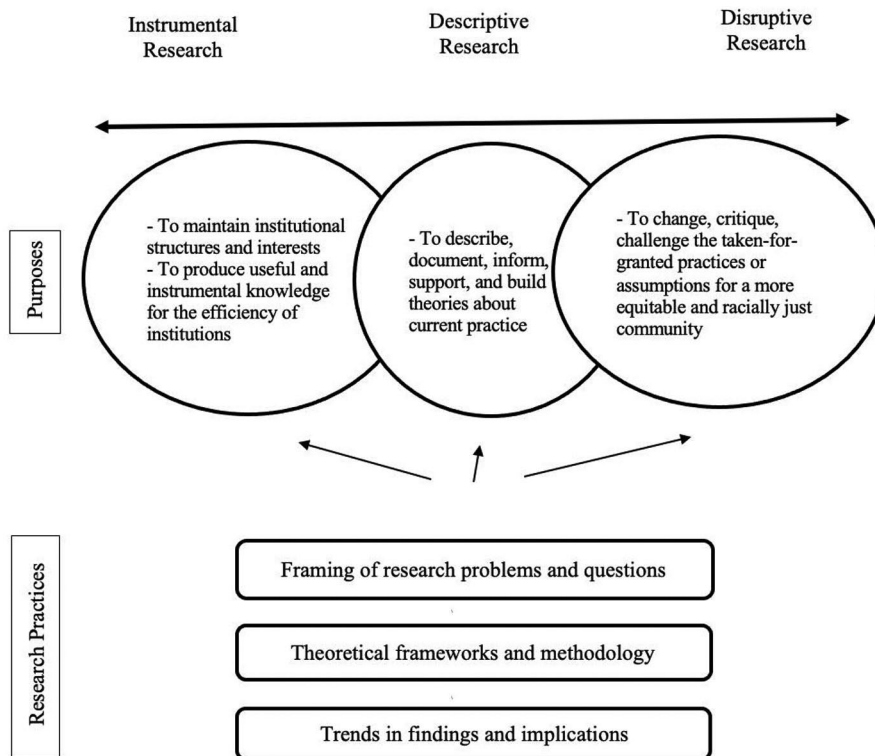


Figure 1. Research as racialized social practice

their findings and implications. Our analysis positions CRP research on the spectrum of research as racialized social practice ranging from maintaining the racist status quo to intentionally disrupting it.

Methods

Given the purpose of this review, we identified empirical research on preparing K–12 pre-service general education teachers for CRP in the United States. While many concepts, such as “culturally congruent” (Mohatt & Erickson, 1981) and “culturally appropriate” (Au & Jordan, 1981), have emerged in the educational research landscape, these approaches differ from CRP in their perspectives of accommodating marginalized students’ home culture to the dominant values and expectations (Ladson-Billings, 1995). We value and engage in the movement toward CSP (Alim et al., 2020; Ladson-Billings, 2014), but relevant empirical work in teacher preparation for CSP has been limited to date and was thus excluded from this review (e.g., Parkhouse, 2015; Ramirez et al., 2016). We hope that our analysis of existing research on CRP will lead to thoughtful engagement with CSP in teacher preparation, given that current CSP conceptualizations certainly work to disrupt the racially inequitable status quo.

To identify relevant research, we conducted Boolean searches in ERIC, PsycINFO, and Academic OneFile databases using the search terms, “culturally responsive” (or “culturally relevant”) and “pre-service teacher/s” (or “teacher candidate/s,” “student teacher/s,” “teacher education,” “teacher preparation”). We looked for peer-reviewed English-language research studies published between 1995 and 2021 (i.e., since Ladson-Billings proposed the CRP theory). Initial searches yielded 450 unique results. With this review’s focus on the learning of PSTs, we included studies that follow up with program graduates into their initial years of teaching and excluded articles that feature teacher educators and in-service teachers or evaluate the merit or worth of a program. We included data-based research, thus excluding conceptual/theoretical articles without identifiable research questions and methodology. Finally, we only included studies from the U.S. context. Application of these inclusion and exclusion criteria yielded 134 relevant studies.

Analysis and Findings

Guided by the framework of research as racialized social practice, we analyzed three research components in each of the 134 studies: (1) framing of research problems and questions; (2) theoretical frameworks and methodologies; and (3) trends in findings and implications. Given the large body of literature identified, it was impossible to cite all the studies in the extensive bibliography even though our analysis drew from all 134 studies. In discussing the findings, we use a tabular form to present the selected features of sampled studies that derived from the theoretical framework and our reading of the studies (see **Table 1** and **Table 2**).

The first five features refer to the research-framing component. Specifically, statements about the cultural mismatch between the homogeneous teaching force and diverse student population (Feature 1); race- and class-based education inequalities (Feature 2); systemic inequity and institutionalized oppressions that produce and reproduce inequalities (Feature 3); and the role of teachers, teaching, and teacher education in addressing educational inequality and inequity (Feature 4) often formulate the research problem. As a result of the problem framing, research questions that investigate the influence of structured learning opportunities within TPPs on PSTs' learning and development are the dominant inquiries (Feature 5). The next four features refer to the presentation of CRP theories (Feature 6) and methodological practices (Features 7–9). The last three features refer to research findings and implications. Specifically, we analyzed the extent to which CRP research examines the role of race and racism in PSTs' understanding and enactment of CRP (Feature 10), attends to the complex and interactive nature of learning to teach (Feature 11), and/or focuses mostly on what PSTs learn as a result of the structured learning opportunities (Feature 12). In our tabulations, an "X" indicates that statements pertaining to a specific feature are identifiable in the studies. Borrowing from the idea of proportionate stratified sampling, approximately 40% of the studies published in each of the three decades were sampled. We purposefully selected studies that are typical examples of each research cluster, examples that showcase the variation within each cluster, and exemplar studies to provide a more in-depth illustration.

Among the reviewed studies, researchers constructed their research problems by connecting arguments regarding culture, educational inequality and inequity, and ideas about and purposes of learning, teaching, and teacher preparation in various configurations. The framing of research problems not only informed the type of questions proposed, but also shaped researchers' choices of theoretical framework and methodology. Therefore, certain research framing and practices produced findings with specific implications for policy, research, and practice in teacher preparation for CRP. The research-as-racialized-social-practice continuum facilitated the organization of the studies into two broad research clusters. Cluster 1 included instrumental and descriptive research (92 studies), while Cluster 2 included descriptive and disruptive research (42 studies). Figure 2 summarizes the key characteristics and connections within and across the two clusters.

It is important to emphasize that in using the research-as-racialized-social-practice lens, our goal is not to identify or pinpoint practices of individual studies; rather, it is to present patterns in research practices and identify trends and issues that help move the field forward. Research practices within each cluster vary and are by no means homogeneous or monolithic. Although we clustered each study based on a careful assessment of the study's primary focuses, there are similarities and substantial complexity among and across studies in both clusters. For instance, a primarily descriptive study could have certain aspects that challenge the status quo. Therefore, it is important to consider research practices as complexly situated along the research-as-racialized-social practice continuum, despite the important differences between studies serving to maintain existing structures, and those disrupting dominant norms. An additional section is dedicated to discussing aspects of research practices not captured in either cluster.

Cluster 1: Instrumental and Descriptive Research

We categorized 92 studies in Cluster 1 and present 41 studies in Table 1. Cluster 1 studies emphasize the problems and solutions of the widely recognized cultural mismatch between the homogenous teaching force and diverse school populations, while paying little to no attention to systemic inequity in the framing of the studies, the elaboration

Table 1. Cluster 1 Research

1. Cultural mismatch
2. Educational inequalities
3. Recognizing and challenging systemic inequity
4. TPPs' responsibility to prepare PSTs for diverse student populations
5. Investigating whether and how learning opportunities influence PSTs' learning or development
6. Elaborative and critical-oriented CRP theories
7. Qualitative methods
8. Quantitative methods
9. Researcher reflexivity or member checking
10. Examining race and racism in learning to enact CRP
11. Attending to the complexity of learning to teach diverse student populations
12. Influence of learning opportunities on PSTs' learning and enactment of CRP

Sampled Studies	Research Framing					Theoretical Framework & Methodology					Findings & Implications		
	1	2	3	4	5	6	7	8	9	10	11	12	
1995–2004 (45% of n = 11)													
Daunic et al. (2004)	X	X		X	X			X		X		X	
McCray et al. (2002)*	X	X		X	X		X			X		X	
Stachowski (1998)	X	X		X	X		X	X				X	
Vaughan (2004)		X		X					X		X		
Xu (2000)	X	X		X									
2005–2014 (43% of n = 55)													
Adams et al. (2005)	X			X	X		X				X	X	
Akiba (2011)	X			X	X	X	X				X	X	
Bennett (2008)	X	X		X	X		X				X	X	
Bergeron (2008)	X			X	X	/	X		X		X	X	
Bondy et al. (2012)	X	X		X	X	/	X				X	X	
Chicola (2007)	X			X	X	/	X	X			X	X	
DeVillar & Jiang (2012)	X	X		X	X		X				X	X	
Downey & Cobbs (2007)	X			X	X		X				X	X	
Edwards & Kuhlman (2007)	X			X	X		X				X	X	
Frye et al. (2010)	X			X	X		X				X	X	
Gunn et al. (2013)	X	X		X	X		X		X		X	X	

Sampled Studies	Research Framing					Theoretical Framework & Methodology				Findings & Implications		
	1	2	3	4	5	6	7	8	9	10	11	12
Hill (2012)	X			X	X	/	X				X	X
Kindle & Schmidt (2011)	X			X	X	/	X					X
Marx & Moss (2011)	X			X	X	/	X				X	X
McCollough & Ramirez (2012)	X			X	X	X	X	X				X
McCormick et al. (2013)	X	X		X	X	/	X					X
Miller & Mikulec (2014)	X		X	X	X	/	X		X			X
Morton & Bennett (2010)	X	X		X	X	/	X	X				X
Pohan et al. (2009)	X	X		X	X	/	X					X
Ross et al. (2007)	X			X	X	/	X					X
Siwatu (2007)	X			X	X	/		X				
Siwatu (2011)	X	X		X	X	/		X				
Walker-Dalhouse & Dalhouse (2006)	X			X	X	/		X				X
Wiggins et al. (2007)	X			X	X	/		X				X
2015–2021 (39% of n = 28)												
Endo (2015)*	X	X		X	X	/	X		X			X
Gunn & King (2015)	X			X	X	/	X	X				X
Hsiao (2015)	X	X		X	X	/		X				
Jacobs et al. (2015)	X			X	X	X	X				X	X
Lickteig et al. (2019)	X			X	X	X	X					X
Ramos (2017)	X			X	X	X	X	X				X
Samuels et al. (2017)	X			X	X	X	X					X
Scott & Scott (2015)	X			X	X	/	X					X
Seglem & Garcia (2015)	X	X		X	X	/	X				X	X
Thomas et al. (2020)	X			X	X	/		X				X
Whitaker & Valtierra (2018)	X			X	X	/	X	X				X

X = a specific feature is identifiable in a study.
 / = CRP discussion is clear, but the critical perspectives are absent.
 * = a study focuses on the experiences of PSTs of Color.

Table 2. Cluster 2 Research

1. Cultural mismatch
2. Educational inequalities
3. Recognizing and challenging systemic inequity
4. TPPs' responsibility to prepare PSTs for diverse student populations
5. Investigating whether and how learning opportunities influence PSTs' learning or development
6. Elaborative and critical-oriented CRP theories
7. Qualitative methods
8. Quantitative methods
9. Researcher reflexivity or member checking
10. Examining race and racism in learning to enact CRP
11. Attending to the complexity of learning to teach diverse student populations
12. Influence of learning opportunities on PSTs' learning and enactment of CRP

Sampled Studies	Research Framing					Theoretical Framework & Methodology				Findings & Implications		
	1	2	3	4	5	6	7	8	9	10	11	12
1995–2004 (n = 0)												
2005–2014 (44% of n = 29)												
Achinstein & Ogawa (2012)*			X			X			X	X	X	X
Aguirre & del Rosario Zavala (2013)				X		X	X		X	X	X	X
Boyle-Baise (2005)*				X	X	X	X		X	X	X	X
Buehler et al. (2009)	X			X		X	X		X	X	X	X
Dantas-Whitney & Waldschmidt (2009)			X	X	X	X	X		X	X	X	X
Durden & Truscott (2013)	X			X		X	X		X	X	X	X
Gere et al. (2009)	X			X		X	X		X	X	X	X
Leonard et al. (2014)	X			X	X	X	X		X	X	X	X
Picower (2013)			X	X	X	X	X		X	X	X	X

Sampled Studies	Research Framing					Theoretical Framework & Methodology				Findings & Implications		
	1	2	3	4	5	6	7	8	9	10	11	12
Price-Dennis & Souto-Manning (2011)	X	X	X	X	X	X	X			X	X	X
Rogers & Mosley-Wetzel (2013)			X		X	X	X				X	X
Ukpokodu (2011)	X	X	X	X	X	X	X					X
Whipp (2013)			X	X	X	X	X				X	X
2015-2021 (46% of n = 13)												
Jackson (2015)*			X	X	X	X	X		X	X		X
Kelley (2020)			X	X	X	X	X	X			X	X
Liggett et al. (2017)	X			X		X	X			X	X	
Pham (2018)*	X		X	X		X	X		X	X	X	X
Truscott & Obiwo (2021)	X		X	X	X	X	X			X	X	X
Zygmunt et al. (2018)	X		X	X	X	X	X		X	X	X	X

X = a specific feature is identifiable in a study.
 * = a study focuses on the experiences of PSTs of Color

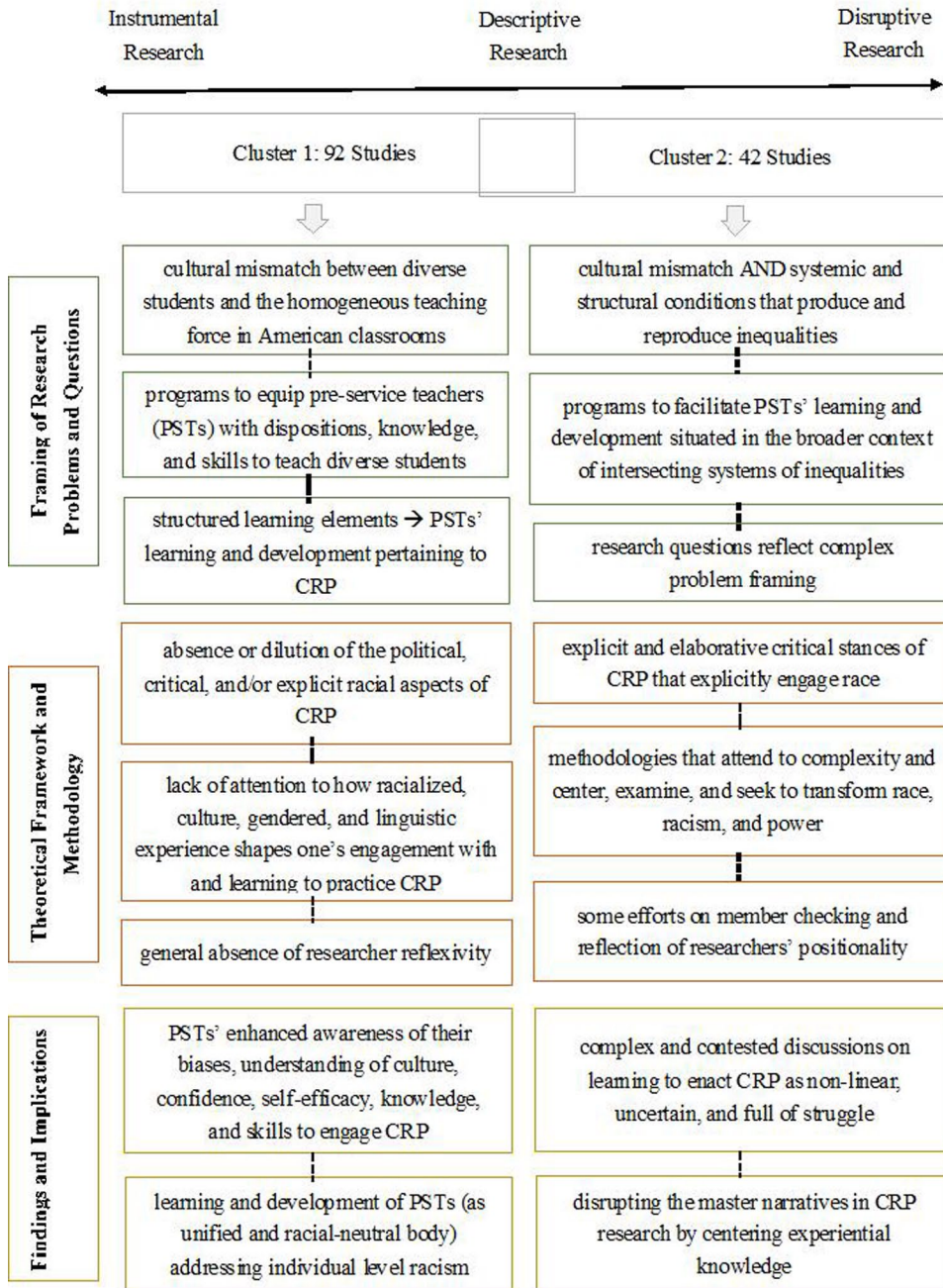


Figure 2. Overview of CRP research

of theories, or the discussions of findings. Collectively, Cluster 1 studies showcase that structured learning opportunities in TPPs help mitigate some challenges encountered by PSTs that are due to cultural incompatibility, yet they have limited in-depth discussions on the role of race and racism in such work for both participants and researchers. Cluster 1 studies produce useful knowledge and/or work to support theory building without an explicit intention to disrupt the racist status quo.

Framing of Research Problems and Questions

As Table 1 shows, Cluster 1 studies explicitly or implicitly framed research problems by stating the cultural mismatch between diverse student populations and the homogenous teaching force, which often has limited cross-cultural experiences and tends to hold stereotypes against students of Color and communities different from their own. Some Cluster 1 studies also cited educational inequalities in achievement measured by standardized tests to emphasize the need to prepare teachers for diverse student populations. Cluster 1 studies generally did not discuss how systemic, institutionalized policies, rules, structures, and norms produce and reproduce inequalities, and create “education debt” in the first place (Ladson-Billings, 2006). To address the “problem” of cultural mismatch, Cluster 1 studies argued that TPPs have the responsibility to prepare PSTs to develop the dispositions, knowledge, and skills to successfully work with culturally and linguistically diverse students.

Subsequently, about 80% of Cluster 1 studies sought to investigate whether, how, and to what extent a program or structured learning opportunities—such as field experience, practicum, cultural immersion, community service learning, pedagogical strategies, or study abroad programs—influence PSTs’ understanding and enactment of CRP. About 10% of the studies (e.g., Akiba, 2011; Pohan et al., 2009; Siwatu, 2011; Whitaker & Valtierra, 2018) tested the associations between individual, programmatic, and contextual factors and PSTs’ mental schema, such as their beliefs toward diversity and self-efficacy and dispositions toward CRP. Four studies developed instruments to measure CRP-related constructs (e.g., Hsiao, 2015; Siwatu, 2007).

We recognize the importance of preparing teachers to have the dispositions, knowledge, and skills to work with culturally and linguistically diverse students. However, the framing of research problems among Cluster 1 studies largely emphasized the need to address individual-level deficiencies or racism, such as lack of cultural knowledge or long-held stereotypes, with little to no attention to systemic racism in society, school rules and norms, and the implications for teaching, learning, and assessment practices. Some studies uncritically used the achievement gap as justification for preparing effective teachers of students of Color. Such research discourse and practice did not recognize the cultural assumptions and epistemologies underlying standardized tests—that is, test scores as objective indicators of merit and worth and the inability of tests to fully capture students' experiences—and failed to problematize their role in sustaining white privilege and enforcing racial oppression (Flynn, 2015). Given the problem framing, the research questions among Cluster 1 studies tended to investigate course or program evaluation-like inquiries, looking for linear relationships between what was taught in pre-service coursework, and dispositional or skill-based learning outcomes with PSTs. We argue that such linear conceptualizations avoid the complexity of how structural and institutional norms and practices reinforce racial injustice and sustain white supremacy.

Theoretical Frameworks and Methodology

Most studies referenced CRP theories (e.g., Gay, 2000; Ladson-Billings, 1995; Villegas & Lucas, 2002) to inform the study or the design of the structured learning opportunities. The empty columns under Feature 6 in Table 1 indicate that the CRP discussions in some studies were brief or underdefined, even though these studies were about preparing PSTs for CRP. The forward slashes (/) in the same column suggest that Cluster 1 studies emphasize teachers' awareness of culture and the role of culture in learning and teaching, teachers' efforts to know their students and modify instructions and curriculum, and teachers' use of assessment to scaffold learning and improve teaching. There is some value to such work in disrupting racial inequity in various policies and ideas. However, the political, critical, and explicit racial aspects of CRP, such as helping students examine and act

against social inequities and injustice, and facilitating students' capacity to investigate racialized knowledge hierarchies—aspects that reflect a commitment to equity and social justice—were largely absent among Cluster 1 studies.

As Table 1 shows, the majority of the studies used qualitative research approaches such as narrative inquiry, case study, ethnography, and action research. About 15% of the Cluster 1 studies used quantitative pre-post or correlational designs with a sample size ranging from 50 to 500. About 10% of the studies used mixed research methods, integrating self-report surveys, participant interviews, site observations, and/or course assignments. Research participants mostly mirrored the current demographic composition of the U.S. teaching force, with only a few exceptions (e.g., Endo, 2015; McCray et al., 2002).

Further, with teacher educators being researchers in all the studies, our analysis suggests that voices of researchers/teacher educators were dominant in the majority of Cluster 1 studies. Only a handful of studies engaged with practices of researcher reflexivity or member checking. Specifically, there was little discussion regarding how researchers as cultural and racial beings made choices about what and how data were collected, and whose interpretations mattered. This absence of researchers' efforts to grapple with their own positionality, culture, and histories can overshadow the interests of participants and other stakeholders (Milner, 2007) and can lead to overly simplified findings and implications (Gere et al., 2009). Without paying careful attention to their own racialized and cultural ways of knowing, researchers and their research practices might reinforce the status quo, further marginalizing what is already unheard, and become epistemologically racially biased (Scheurich & Young, 1997).

Trends in Findings and Implications

The majority of studies suggested that targeted learning opportunities helped PSTs to become more aware of culture and cultural differences and to improve their dispositions, knowledge, efficacy, and skills in implementing CRP. Studies investigating the relationships between individual, programmatic, and contextual variables and PSTs' CRP-related mental schema suggested that (a) gender and class standing were significant predictors of PSTs' diversity beliefs in professional

contexts, whereas previous cross-cultural experiences were not related to PSTs' diversity beliefs (Akiba, 2011; Pohan et al., 2009); (b) programs or learning opportunities, particularly those promoting classrooms as a learning community, instructors modeling CRP, and carefully planned and guided field experience, significantly and positively changed PSTs' professional beliefs, self-efficacy, and commitment, but not their personal beliefs (e.g., Akiba, 2011; Pohan et al., 2009; Wiggins et al., 2007); and (c) PSTs reported significantly higher sense of preparedness and self-efficacy in suburban than urban school settings (Siwatu, 2011). Such work is valuable, particularly for its ability to help PSTs recognize normative racist ideas and support theory building. However, without explicitly linking those racist ideas to racist policies, practices, and systemic inequities, such work with PSTs will fall short of being disruptive of the racist status quo at a structural level.

Only a few studies in this cluster offered a more complex picture of PSTs' journey toward learning to practice CRP, providing additional insights to build knowledge of preparing PSTs to understand and enact CRP in context. For instance, Bergeron (2008) suggested that external mandates, such as high-stakes accountability, narrowed learning and constrained teaching and that teachers must learn to navigate the political context by leveraging support systems, such as leadership and professional communities. Xu (2000) used a case study to examine how three PSTs' perceptions of their own and their students' cultural identities interacted with and influenced their literacy teaching during field experiences. Emphasizing the variability in participants' abilities to enact CRP, the author suggested that preparing teachers for diverse contexts is a complex process involving interactions among multiple factors, including PSTs' understanding of diversity in interactions with instructors, students, and classmates, their exposure to diversity, and their classroom practices (Xu, 2000). Jacobs et al. (2015) provided a detailed account of PSTs' resistance and growth as they interacted with weekly course materials to understand culture and grapple with their own privilege and color-evasive perspectives.

Finally, participants' racial and gender identities were reported in the methodology section and sometimes named in the discussion of findings. However, Cluster 1 studies did not examine how participants' racialized and gendered experiences shape and are shaped by various elements within TPPs (e.g., curriculum, students, mentors, peers),

where race and racism are woven into policies, practices, norms, and procedures. Findings focused on addressing individual-level racism and/or celebrating cultural differences and diversity; such discussions evaded the need to address systemic racial inequity (e.g., how racism is ingrained and nonaberrant in the structures and practices of classrooms, institutions, and societies, how racist policies, norms, and rules influence every aspect of schooling and daily life, and how individuals as policy actors are also part of the system). The critical and political aspects of CRP theories require centering and contextualizing race and common vehicles of oppression in the process of learning to understand and enact CRP. Overall, our analysis suggests that Cluster 1 studies focus on cultural diversity and avoid issues of race.

Cluster 2: Descriptive and Disruptive Research

Cluster 2 consists of 42 studies, and Table 2 presents a sample of 19 studies. Studies in this cluster are characterized by explicit problematization of inequitable policies, norms, and practices that reproduce inequalities and justify the racist status quo. Through elaborative critical lenses, Cluster 2 studies inquire into PSTs' racialized experience of learning to teach within institutional structures and practices that maintain the interests of whiteness and white supremacy. By situating PSTs' experiences within a broader intersecting system of inequity, Cluster 2 studies turn the spotlight to tensions and complexity in the process of learning to enact CRP and the need to reframe and disrupt taken-for-granted practices/assumptions by centering the marginalized epistemologies in teacher preparation for CRP.

Framing of Research Problems and Questions

As Table 2 shows, some Cluster 2 studies, like Cluster 1 studies, discussed the challenges of cultural mismatch and the importance of preparing all teachers to work with culturally and linguistically diverse students. In addition to cultural mismatch, Cluster 2 studies also emphasized the systemic, institutional, and structural conditions—racialized policies, norms, knowledge hierarchy, and white supremacy ideologies such as meritocracy—that produce and reproduce educational inequalities. Although these studies recognized the need for PSTs to

know their students' cultures and to debunk individual biases toward marginalized students, families, and communities, they emphasized the need for teachers to recognize, examine, and challenge inequitable structures and systems beyond the classroom.

As such, Cluster 2 studies investigated how structured learning opportunities—such as critical reading, coteaching, attending town hall meetings, or justice-oriented programs—influenced PSTs' learning and development as change agents who are politically conscious, capable of examining institutionalized, racist, oppressive policies and structures, and who strive to deconstruct and reframe knowledge hierarchy and connect critical reflexivity to actions within and beyond classrooms (e.g., Durden & Truscott, 2013; Kelley, 2020; Picower, 2013; Price-Dennis & Souto-Manning, 2011; Whipp, 2013; Zygmunt, 2018). Because preparing and becoming a culturally responsive teacher are fraught with multiple impediments, Cluster 2 studies normalized and inquired into the nature of PSTs' struggle and nonengagement with CRP (e.g., Buehler et al., 2009; Ukpokodu, 2011) or investigated how factors such as accountability policies, program structures, teacher educators' racialized lenses, peers, supervisors' linguistic strategies, and community members' experiences shape PSTs' learning and enactment of CRP (e.g., Gere et al., 2009; Liggett et al., 2017; Pham, 2018).

Cluster 2 studies situated the problem within a broader context of intersecting systems of inequalities in which multiple stakeholders and factors interact with PSTs' racial identity and influence their racialized experience in enacting or resisting CRP. The framing of research problems signaled a complex undertaking beyond simply knowing student culture and enacting good teaching. Consequently, the research questions tended to capture complex pictures rather than linear relationships between learning opportunities and PSTs' development of CRP. In fact, such broad problem framing that considers the complexity of learning and enacting CRP reveals a variety of often uncomfortable questions that could move the field forward, particularly as it attends to and seeks to disrupt the racist status quo.

Theoretical Frameworks and Methodology

Closely aligned with the framing of the research problem, all Cluster 2 studies employed explicit and elaborative critical lenses. These studies

drew from CRT, social justice, or feminist frameworks to guide their inquiries. When referring to CRP, these studies emphasized that culturally responsive teachers must improve students' learning and affirm the cultural assets that students bring with them while facilitating students' capacity to critically investigate knowledge construction and act against social injustices. Culturally responsive teachers must also recognize and seek ways to challenge inequitable, racist policies, rules, and norms within and beyond classrooms, including advocating on behalf of their students.

Almost all Cluster 2 studies employed qualitative research designs, with the majority adopting a case study approach allowing for in-depth explanations of the process, meaning, and contexts involved in CRP enactment. Approximately half of the Cluster 2 studies engaged in member checking and/or discussed how researchers' professional and sociocultural positionality influenced research practices. An exemplar study is Gere et al. (2009), which investigated how researchers' and students' racial identities inflected responses to and understandings of the cultural competence dimension of CRP. The researchers made their White raced consciousness, self-awareness around unchecked ignorance, and discomfort visible throughout the study. By centering race and racism throughout their research, they raised the question of whose voices tend to be more dominant or marginalized in this line of research.

Trends in Findings and Implications

Given their research framing and elaborative critical lenses, Cluster 2 studies presented rather complex and contested discussions on what it means to challenge racial inequity and promote social justice for PSTs within particular local contexts. For example, Buehler et al. (2009) used a case study to examine what negotiation with cultural competence entailed for a White female novice teacher who was committed to working in urban and underresourced schools. The authors suggested that cultural competence is not a clearly defined capacity or quality, with PSTs progressing through linear developmental steps. Rather, the manifestation of cultural competence interacts with and is shaped by emotion, race, and school contexts as "an arduous journey filled with forward movement followed by missteps and backsliding" (Buehler et al., 2009,

p. 416). They further suggested that uncertainty should be the heart of how TPPs conceptualize CRP and that teachers and teacher educators should embrace the complexity of learning to teach.

Cluster 2 studies tended to have explicit, in-depth discussions on the function of race, racism, and institutionalized oppressions in the processes of learning and teaching. For instance, examining the influence of a predominantly White institution on development of CRP among PSTs of Color, Jackson (2015) found that while the topic of race is important to PSTs of Color, they are skeptical of university professors' diversity approaches and their commitment to CRP. As a result, PSTs of Color did not demonstrate more understanding of and commitment to CRP, suggesting the need for an explicit focus on race and its importance in teacher education. Liggett et al. (2017) studied university supervisors' use of language on race and culture in relation to CRP as they work with PSTs during their practicum experiences. They found that university supervisors used certain language strategies to redirect discussions about race in a way that simplified CRP and made race or culture unexpected events in enacting CRP.

Another key feature among Cluster 2 studies was the disruption of dominant narratives by centering marginalized voices and knowledge. For instance, Pham (2018) drew on sociocultural learning theory and CRT to study how peer learning between two PSTs of Color shaped their pedagogical development. By considering PSTs of Color as both learners and experts, Pham challenged the assumption of field supervisors being the sole source of knowledge, valuing experiential knowledge as a counter-story. Through counter-storytelling, the study further highlighted how the existing program structure is insufficient to meet the needs of PSTs of Color and proposed new possibilities of including the experiential knowledges of PSTs of Color. Focusing on preparing culturally responsive mathematics teachers, Kelley (2020) explicitly reframed the conception of parent engagement by centering how communities and families define the concept. Finally, Zygmunt et al. (2018) studied the impact of a community-engaged program in which PSTs spent an entire semester of coursework in a local community, working closely with community members as mentors. This programmatic approach not only challenges the notion of who is the knower and whose knowledge matters, but also physically, socially, and epistemologically disrupts traditional and institutional boundaries in teacher education.

Cluster 2 studies are located toward the “disruptive” end of the research-as-racialized-social-practice continuum that aims to challenge assumptions, institutional regulations and boundaries, forms and sources of knowledge, and power hierarchies for a more racially just society. We do not suggest that these research practices are the best practices for all challenges. However, like learning to practice CRP, these research approaches reflect a way of being and thinking in which researchers must be willing to ask uncomfortable questions centered on whiteness, race, and racism if they intend to disrupt the racist status quo.

Looking Across The Clusters

Our discussion thus far, coupled with Tables 1 and 2 and Figure 2, illustrates the patterns of research practices for each cluster and variation within each cluster. Given the complexity of placing the two clusters of studies along a continuum, it is also necessary to capture the often not-so-distinct research practices.

Very Few Studies on PSTs of Color

Across the two clusters, only a dozen studies focus on the perspectives and experiences of PSTs of Color, indicating their marginalization in research on preparing teachers for CRP. About half of the studies investigated the impact of structured learning opportunities on the development of PSTs of Color (e.g., Boyle-Baise, 2005). Some looked into how former educational or sociocultural experiences influenced decisions to teach and perceptions of teaching (McCray et al., 2002). Others investigated how PSTs of Color committed to social justice navigated the program, school, and larger policy contexts where racism is ingrained (e.g., Achinstein & Ogawa, 2012). Although this group tended to have a social justice impulse and centered the voices of PSTs of Color, not all studies explicitly disrupted the existing assumptions and institutional power relations, as shown in Tables 1 and 2. However, this work of centering the experiences and perspectives of PSTs of Color is an important approach toward decentering whiteness in teacher education research and practice (Sleeter, 2017).

The Overlap

About a dozen studies lie between the two clusters along the research-as-racialized-social-practice continuum. Many of these, built on clear and critical theorizations of CRP, proposed to investigate the influence of a program component or strategy on PSTs' learning and development. However, the analysis and discussion did not always reflect the criticality stated in the theoretical framework, tended to brush aside the role of race and racism in PSTs' learning and teaching experiences, and reflected dominant researchers' perspectives supported by thin data. In fact, these studies led to extensive discussions between ourselves, because uncertainties in the data seemed to be overpowered by researchers' interpretations. The findings generally suggested that while PSTs become more aware of their biases and misconceptions and more capable of enacting CRP, more work needs to be done. Although these studies stated a social justice stance, the research practices were not fully aligned with the core antiracist theorizations of CRP.

Implications and Conclusions

In alignment with the CSP movement (Alim et al., 2020) and a recent call to grow and develop from CRP's existing knowledge base (Dixon & Ladson-Billings, 2017), this critical review aims to identify research practices that perpetuate the white gaze and offer contrasting possibilities and perspectives that help move the field toward sustaining and centering linguistic and cultural pluralism. Using the lens of research as racialized social practice, our analysis reveals that dominant research practices function to perpetuate the interests of whiteness in teacher education, despite good intentions and hard work. Our analysis also illustrates wide-ranging, critically constructed, place-based, and complexity-oriented research practices that serve to de-center the structures, ideas, and ideologies perpetuating the systemic, racist status quo.

Drawing from our analysis, we propose that to move the field forward toward the six principles of CSP, teacher education researchers can construct research questions capable of generating new knowledge to disrupt racial injustice; utilize and further develop critical

theoretical frameworks that sufficiently attend to various aspects of race and racism in teaching, learning, and society, and are meaningfully linked to disruptive research methodologies; and, finally, attend clearly to the ability of research to disrupt the racist status quo within their findings and implications.

Shifting from Individuals to Individual and the System

Rather than problematizing the inadequacy in dispositions, knowledge, and skills of PSTs and focusing on the cultural mismatch between teachers and students as presented in most of the studies, we see a need for researchers to pay attention to the broader contexts of learning to teach, considering historical, political, social, economic, racial, and cultural realities weaved into the intersecting systems of inequity. Without putting institutional injustice and systemic oppression front and center, research on teacher preparation for CRP can only address racism and oppression at the individual level. Without shifting the problem from individuals to the system, teaching need not be a political activity that challenges the unjust racist system reinforced by social, political, and economic factors, or one that questions assumptions of legitimate knowledge as well as social and school realities deemed normal, neutral, and objective.

This shift in problem framing can broaden the possibilities of CRP inquiry: What and how do PSTs know about the historical, political, and economic contexts of the local community? How do PSTs understand the nature of race, racism, and culture in the local community through their cultural, raced, and gendered worldviews? How do White PSTs negotiate white guilt while engaging in CRP that confronts injustice and promotes equity? How do PSTs of Color make sense of their internalized racism as they engage in CRP and interact with diverse students and the local community? These questions are not exhaustive, but they provide an opportunity to rethink teacher education research inquiries.

Including Multiple Agencies and Focusing on Interactions

The majority of studies, regardless of methodology, employed linear logic and focused on the influence of a program or a targeted learning

approach on PSTs' learning and development. This logic emphasizes the predictability and linearity of relationships among different factors, such as programs and individuals, with little to no attention to the influence of contextual factors or the deeply interconnected nature of these features. We propose that the inherently complex and interactive nature of PSTs' learning to enact CRP in programs, practicum schools, and classrooms calls for a different lens to conceptualize research on teacher education. Cochran-Smith et al. (2014), along with Strom and Martin (2017), powerfully illustrate the possibilities of conceptualizing the process of learning to teach as nonlinear, complex, and contingent casual processes with human and nonhuman factors. Further, the work by Indigenous scholars, as described earlier, has always attended to complexity and is informative here (e.g., Simpson, 2017). We recommend teacher education research on CRP to move in directions that not only embrace expansive complexity but also proactively interrogate it.

Engaging In Critical Reflexivity

Our analysis found that most of the studies did not include researchers' reflections on how their cultural and racialized lenses influenced their process and outcome, nor did they prioritize the evolving cultural identities of research participants and their cultural, racialized, and gendered ways of experiencing and seeing the world. Milner (2007) urged researchers whose studies have an explicit focus on race and culture to engage in practices of "researching the self, researching the self in relation to others, engaged reflection and representation, and shift from self to system" (p. 395) to avoid misinterpretations, misrepresentations, and underrepresentation of research participants, particularly participants of Color. Following Milner's (2007) call, we suggest that researchers can engage in self-(re)searching processes to understand that how they construct knowledge is never detached from their cultural and racialized experiences, situated in a broader historical, socioeconomic, and political context. As researchers conduct studies related to race and culture, they can engage in understanding their participants' racialized and cultural ways of experiencing and knowing the world, and the potential tensions arising among different systems of knowing, and actively involve participants in critically examining

and co-constructing knowledge. Some suggest that studies with an explicit focus on culture and race might seek race-based methodologies and epistemologies to present the lives and experiences of PSTs of Color, the local communities, parents, and students from their perspectives (e.g., Milner, 2007; Scheurich & Young, 1997). Additionally, we see the need for researchers like us to recognize our privilege, interests, and power in constructing and presenting knowledge, and reflect on how different perspectives and interests are present, absent, and negotiated in the research process, outlining that process for the research audience.

In conclusion, we recommend that teacher educators and educational researchers thoughtfully engage in the conceptualization of CSP as put forward by Alim et al. (2020). Further, we recommend that research produced on teacher education explicitly and consciously engage with research as racialized social practice, striving to disrupt the inequitable status quo rather than reify it with the research questions posed, theoretical frameworks used, and methodologies employed. By attending to racism at the individual and systemic level with PSTs, proactively interrogating complexity among and between varied actors and agencies, as well as engaging in critical reflexivity, we suggest that the original intents of CRP and the forward movement from CSP can come much closer to realization through both teacher education research and practice.

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