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UNIVERSITY OF CALIFORNIA SAN DIEGO
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Cultivating Culturally Responsive Reform:
The Intersectionality of Backgrounds and Beliefs
on Culturally Responsive Teaching Behavior

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of
Education

in

Educational Leadership

by

Michelle Sadrena Pledger

Committee in charge:

University of California San Diego

Professor Alan J. Daly, Chair
Professor Sherice Clarke

California State University, San Marcos

Professor Gilbert Valadez

2018

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University of California San Diego
California State University, San Marcos

2018

DEDICATION

For my mom, Sadie Pledger, who reminds me that, “I am enough.”

For my dad, Dwight Pledger, who reminds me that, “I am young, Black, and gifted.”

For my students, who remind me that, “I am here in service of their unlimited potential.”

.

EPIGRAPH

We Teach

By Michelle Sadrena Pledger

*We teach...we teach...we teach 5-18 year olds,
some bored, some intrigued,
some disinterested, others deceived,
Some parents condemn us for being too liberal, while other parents accuse us of being too conservative,
understanding is what we strive to have because we know we're giving all we have to give
when we teach.*

*Sometimes it's like being a Shepherd to a sheep who thinks he already knows where the grass is,
we want to let him go because that's one less sheep for us to watch,
but we'll risk everything to get him back because that's one more life that won't get lost.*

*Teaching means building up that trust, fostering a relationship, admitting we don't know everything,
and promising not to give up on them when we teach.*

*We teach with all our energy, think about our students seven days a week,
day, night, awake and asleep.
While that may seem pathetic to some, it's because they have no idea where our kids come from, but we're betting our lives on what they'll become after we teach.*

*We teach truth, we teach lies, objectivity in disguise, apologize later but keep our pride,
because our goal is not to be liked.*

*We're not here to hold their hand and tell them life is fair,
they need to know the realities of injustice, so they'll be inspired to care.*

*And whether they agree with us or not at least they are being exposed to something different, something new, something out of their control
so that when they leave our classrooms they'll be inspired to know.*

*To ask questions, investigate, to be curious, to contemplate,
why they are here, what they can do, who they can help, and which method they should choose
when they teach.*

We teach imperfectly, but we are on that elusive road to perfection, our students are becoming young adults and they don't need intellectual protection.

We no longer fear making mistakes because we're not above correction.

*We want our kids to know the value of saying, "My bad, my mistake, I was wrong",
because that is the very evidence of learning, and it makes their education strong,
and these are values they'll sustain long after we're gone, long after we teach.*

We teach and ask God for strength because in our students, we believe, we believe, that's why we teach.

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Friends~ I would like to acknowledge "The Council" (Tina, Shani, Matt, Jen, Phil, Asal, Bryan, Carlee) for tolerating my absence from many social gatherings. I cannot wait to be able to say "Yes!" to every subsequent invite. Thank you all for supporting me through what proved to be the most professionally and personally challenging time of my life. To Fran, Parag, Julia, Andrea, Anna, and Cate for understanding that deep friendship is not measured by the quantity of time we spend together, but the quality. To the "Divergent Dozen" aka "The Transformative Twelve" aka "Historically Great Cohort" aka Adam, Sara, Jen, Julie, Pilar, Martin, Christina, Kyle, Jonathan, Stan, Michelle, and Geneva, your humor, drive, and ability to accept me, neuroticism and all, no questions asked (well maybe a few

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VITA

EDUCATION

- 2018 Doctor of Education, Educational Leadership, Joint Doctoral Program of University of California San Diego and California State University, San Marcos
- 2005 Master of Pacific International Affairs, Latin America Focus, International Development and Non-Profit Management, University of California San Diego
- 2001 Bachelor of Arts, International Studies, University of California Irvine

PROFESSIONAL EXPERIENCE

- 2018 Project Co-Director, Deeper Learning Hub, Center for Research on Equity and Innovation, High Tech High Graduate School of Education
- 2007-2017 9th grade World Cultures, Geography and Literature, 11th grade U.S History and American Literature, Founding Teacher, High Tech High North County
- 2005-2007 11th grade U.S History and American Literature Teacher, High Tech High International

PUBLICATIONS

- Pledger, M.S., (2018, October) "I'm an Exhibitionist of Student Learning": Public presentations stimulate deeper learning, *Childhood Education*, 94:6, 20-24, DOI: 10.1080/00094056.2018.1540193
- Pledger, M.S., (2016, December) On Examining Slavery Through Deeper Learning Edweek Deeper Learning Blog. Retrieved from:
http://blogs.edweek.org/edweek/learning_deeply/2016/12/i_didnt_know_slavery_was_that_bad.html
- Pledger, M.S., (2015, December) Other People's Children are My Children...at Least for Nine Months. *Unboxed: A Journal of Adult Learning*, issue 14.

ABSTRACT OF THE DISSERTATION

Cultivating Culturally Responsive Reform:
The Intersectionality of Backgrounds and Beliefs
on Culturally Responsive Teaching Behavior

by

Michelle Sadrena Pledger

Doctor of Education in Educational Leadership

University of California San Diego, 2018
California State University, San Marcos, 2018

Professor Alan J. Daly, Chair

Despite numerous education reform efforts, national academic achievement data continues to reflect a marked disparity between culturally and linguistically diverse students and their white counterparts. Currently, 50% of K-12 public school students are students of color, and this percentage is projected to increase as the cultural composition of United States diversifies. Research indicates that, regardless of race, the vast majority of educators are not adequately prepared to respond to the academic and socioemotional needs of culturally and linguistically diverse students, further emphasizing the need for legitimate reform in educational policy and pedagogical practice.

This study explored how the practice of culturally responsive pedagogy can help close opportunity gaps and improve instructional practices and academic success rates for students

of color. The study takes a comprehensive look at federal policy, theoretical frameworks, and the foundations of culturally responsive pedagogy. It goes on to examine culturally responsive pedagogy in practice, as well as teacher, school, and leadership characteristics that help promote a culturally responsive educational environment. This multiphase mixed methods approach utilized surveys, background questionnaires, and case study data from self-selected improvement pathways to 1) better understand the intersectionality of teachers' backgrounds and beliefs and its impact on pedagogical behavior, and 2) identify the impact of collegial coaching and personalized professional development design on the improvement of culturally responsive teaching and classroom management self-efficacy. The study found that cultural disposition awareness, values-influenced teaching philosophy, and propensity for professional growth impact culturally responsive teaching behavior. The study also determined that culturally responsive pedagogy self-efficacy beliefs, which are predictive of behavioral change, increased for teachers in all three improvement pathways, though the extent of increase varied based on the selected pathway and case study participant. These findings have implications for practice as teachers can improve their ability to meet the needs of culturally and linguistically diverse students, and implications for policy, in that schools and districts can design policy that supports effective implementation of professional development and coaching that centers on the cultivating self-efficacy in culturally responsive instruction for the purpose of improved academic and socioemotional outcomes for *all* students.

CHAPTER I: INTRODUCTION

The continuous flow of immigration has altered the racial composition of American schools, and currently 50% of K-12 public school students are students of color (National Center for Education Statistics [NCES], 2016). This percentage is likely to increase based on general population projections which indicate that by the year 2044 People of Color will outnumber White people, 53% to 47% (Colby & Ortman, 2014; Rennie, 2015; Pew Research Center, 2008), a shift that will impact school demographics across the nation, and potentially deepen the academic divide. Though the educational attainment of culturally and linguistically diverse students is imperative to the health and future of our country, gross disparities in student engagement, academic achievement, disciplinary action, and college enrollment persist. Black and Latino students experience lower levels of student engagement in comparison to their White counterparts (Voight, Hanson, O'Malley, & Adekanye, 2015) and in recent national reports, they continue to experience significant gaps on reading and mathematics assessments administered in fourth, eighth, and twelfth grade (NCES, 2017). Out of the 1.2 million students who dropout of high school every year, a disproportionate number is Black and Latino (Larrier, 2018, NCES, 2017). Consequentially, from 2000 to 2015 the percentage of White, Black, and Latino students enrolled in college was 58%, 14%, and 17% respectively (NCES, 2016). The interconnected nature of student engagement, student achievement, and college enrollment is well documented, and it can have a significant impact on a student's life trajectory.

An ever-present concern in education is that disaggregated data reflects a significant disparity in academic performance between Black and Latino students and their White counterparts in many regions of the United States (Center for Education Policy Analysis

[CEPA], 2016). In California, Latino students have the lowest math and reading scores on the National Assessment of Education Progress in the country, moreover, many states report similar significant gaps between Black and White students. Between 2003 and 2013, the Black-White achievement gap has remained the same in 21 states, and the Latino-White achievement gap has not changed in 28 states (CEPA, 2016). When ten years yields little to no progress in achievement gap data, it is evident that traditional approaches to teaching have not resulted in substantial improvements in education. In efforts to shift blame, discussions of achievement gaps tend to adversely characterize students of color as deficient or deviant, when in reality it is a defective system that perpetuates inequities in education (Milner, 2012; Skrla, Scheurich, Garcia, & Nolly, 2004; McKenzie & Scheurich, 2004). This chapter includes the statement of the problem, the purpose of the study, a summary of the theoretical frameworks and conceptual model that guide the study, research questions, and a brief overview of the methodology used to conduct the study.

Statement of the Problem

Closing the achievement gap between culturally and linguistically diverse students has proven to be a tremendous challenge for educators, school leaders, and policy makers. Energy and resources might better be invested in closing opportunity gaps, namely the systems that generate inequitable opportunities and experiences for specific student populations (Henfield, Washington, & Bird, 2014; Milner, 2012). Students of color experience opportunity gaps in teacher quality, teacher expectations, access to rigorous coursework, availability of civic learning opportunities, equitable funding, and much more (Flores, 2007; Akiba, LeTendre & Scribner, 2007; Kahne & Middaugh, 2008). These researchers have illustrated clearly how opportunity gaps are precursors to achievement gaps. Milner (2012) found that in order to

decrease opportunity gaps, educators need to recognize students as whole beings, acknowledge cultural differences between teachers and students, and adopt a more asset-based understanding of culturally and linguistically diverse students. Currently, instead of being viewed as resourceful individuals with unique potential, who deserve a quality education, diverse student populations are often viewed as a problem to be solved (Milner, 2012).

Fortunately, in response to deficit-based characterizations of students, there is a form of critical pedagogy that encourages educators to use more asset-based orientations. Culturally responsive pedagogy is a student-centered approach that invites the cultural identities and sociopolitical contexts of *all* students in the classroom to drive curriculum design, instructional practices, classroom structures, and classroom policies (Brown, 2007; Hammond, 2014; Aronson & Laughter, 2016). Researchers have demonstrated the positive benefits of culturally responsive pedagogy as it pertains to student achievement, student engagement, racial identity development, and classroom behavior; in essence, its ability to increase opportunity and improve academic success for marginalized students (Ladson-Billings, 1992; 1995; 1998; Pewewardy & Hammer, 2003; Gay, 2002; Brown, 2007). Many scholars agree that thoughtful consideration and incorporation of students' cultural heritage into their learning has significant impacts on their educational trajectory (Ladson-Billings, 1992; Banks & Banks, 1995; Gay, 2010). Consequently, widespread implementation of culturally responsive curriculum, practices, and policy could dramatically minimize the academic opportunity gaps that adversely impact underrepresented and underserved student populations.

Zamudio, Russell, Rios, & Bridgeman. (2010) accurately describe what students of color face when they enter many classrooms across America:

Students of color do not have the advantage of walking into a classroom as individuals; they walk in as black, brown, or red persons, with all the connotations such racialization raises in the classroom. They do not walk into a classroom where the curriculum embraces their histories. They walk into a classroom where their histories are distorted, where they feel confused about their own identities, vulnerabilities, and oppressions.
(pp. 18-19)

Although these researchers paint a bleak reality of what many marginalized students face, there are instances when students of color and their dynamic histories are honored in the classroom, particularly by teachers of color. Yet, research indicates that both White teachers and teachers of color are generally ill-equipped to address issues of cultural proficiency or to teach in a culturally responsive manner (Gay, 2002; Pewewardy & Hammer, 2003; Sampson & Garrison-Wade, 2010; Vilson, 2015). This is particularly alarming when the nation is experiencing a disproportionate racial distribution of teachers, as White teachers compose 82% of public school educators (NCES, 2012; CEPA, 2016). These demographic realities further validate the urgent need for customized improvement pathways and professional development that fosters the awareness and utilization of culturally responsive pedagogy, and the identification of teacher characteristics that promote its sustainable use.

Purpose of the Study

The purpose of the research study is to 1) better understand the connection between a teacher's background and beliefs and its impact on pedagogical behavior, and 2) identify the impact of collegial coaching and professional development design on the improvement of culturally responsive teaching and classroom management self-efficacy. This research study will add to the body of literature by utilizing a more holistic approach in an effort to

understand and improve culturally responsive efficacy. The researcher used existing and original frameworks to deepen teachers content knowledge, confidence, and conduct related to culturally responsive pedagogy, to positively impact opportunity and achievement gaps often experienced by culturally and linguistically diverse students.

Research Questions

The research questions are as follows:

- 1) How do educators' backgrounds impact their culturally responsive teaching and classroom management self-efficacy?
- 2) To what extent do teachers' backgrounds and beliefs impact their stated teaching behavior?
- 3) In what ways does each culturally responsive improvement pathway impact culturally responsive pedagogy awareness, application, and culturally responsive teaching and classroom management self-efficacy assessment?

Theoretical and Conceptual Frameworks Overview

Two theories, Critical Race Theory (CRT) and Self-Efficacy Theory (SET) were utilized in this mixed methods research design to analyze the findings via social science theory and transformative paradigm theory, respectively. A brief overview is included here, and a more detailed explanation of the two theories can be found in Chapter Two. Established in the 1980's, CRT has its origins in the legal realm, and is now used as a theoretical lens in a myriad of subject areas including education (Solorzano, 1997; Tate, 1997). CRT centers on the analysis of policies, structures, and institutions that have deleterious effects on marginalized populations, and places an emphasis on the examination of how race, racism, and other forms of oppression are a product of privilege and power structures embedded in

society. CRT includes five tenets that guide theory and practice: the centrality and intersectionality of race and racism, the challenge to dominant ideology, the commitment to social justice, the centrality of experiential knowledge, and the interdisciplinary perspective (Solorzano, 1997; Solorzano & Bernal, 2001; Solorzano, Villalpando, & Oseguera, 2005; Yosso, 2005; Zamudio et al., 2011). Through analysis of these tenets, CRT theorists advocate for societal change.

About a decade prior to the establishment of CRT, Albert Bandura developed Self-Efficacy Theory (SET) in the late 1970's, and it was used to study the predictive power of cognitive ability on behavioral change (Bandura, 1977). SET has its origins in the field of Psychology, yet the theory is applicable in a myriad of fields that can benefit from understanding how individuals' beliefs in their own abilities can translate into behavioral change, including the education field. While, self-efficacy beliefs can have a significant impact on confidence levels and completed actions, efficacy expectations may differ in magnitude, generality, and strength, which is why information sources can play a pivotal role in developing efficacy in individuals. There are four main information sources that assist in the development of self-efficacy beliefs: performance accomplishments, vicarious experience, verbal persuasion, and physiological arousal; and each of these treatments result in varying degrees of successful behavioral change (Bandura & Adams, 1977).

CRT tenets are fundamental to the comprehension of culturally responsive pedagogy and SET treatments are integral to the predictive power of behavioral change. Each theory creates space for critical analysis of belief systems and behavior patterns which can assist in the design of effective improvement pathways. Additionally, the Critical Intersectionality

Framework¹ is a conceptual model situated in CRT and SET. It illustrates the intersectionality of backgrounds and beliefs, its impact on culturally responsive classroom behavior, and helps frame the rationale for the research study.

Overview of Methodology

Culturally responsive pedagogy studies have primarily focused on pre-service teachers and the degree to which they are prepared for the culturally and linguistically diverse students who are in the classroom. A less explored area pertains to in-service and veteran teacher preparation related to this pedagogy. This research study is a mixed methods multiphase study. First, the researcher administered the Culturally Responsive Teaching Self-Efficacy (CRTSE) survey and the Culturally Responsive Classroom Management Self-Efficacy (CRCMSE) survey to teachers at a public charter high school in order to ascertain current perceptions of culturally responsive efficacy. Second, the researcher identified a cohort of six teachers willing to participate in a more in-depth case study. Participants who volunteered to participate in the case study engaged in a semi-structured interview and had an opportunity to select one improvement pathway that suited their availability and comfortability. The improvement pathways consisted of the following: Pathway #1- a guided book study with ideation sessions and audio recorded coaching conversations, Pathway #2- filmed teaching observations, culturally responsive teaching self-assessments, and audio recorded coaching conversations, and Pathway #3- design and facilitation of faculty professional development that centers on culturally responsive pedagogy and audio recorded debrief of professional development evaluations. This method provided multiple inroads to understanding, in that the researcher was able to investigate how individuals situated themselves in their attempts to

¹ The Critical Intersectionality Framework can be found on page 27.

implement culturally responsive pedagogy. Third, the participants engaged in their selected improvement pathways. Finally, the CRTSE and CRCMSE was administered to survey and case study participants at the conclusion of the study to explore shifts in perceived culturally responsive and classroom management self-efficacy.

Significance of Study

As previously stated, opportunity and achievement gaps for Black, Latino, and Native American students are persistent in the American education system. Teachers from all backgrounds struggle to meet the needs of culturally and linguistically diverse students, and the cultural chasm between teachers and students continues to increase. Students desire to engage in content when it is relevant and applicable to their identity and daily lives. To educate students effectively, teachers who connect with students on a personal level increase the probability of academic engagement. A teacher who acknowledges her own sociopolitical context and that of her students can personalize learning, differentiate instruction, and empower student agency. Current research on culturally responsive pedagogy provides frameworks and best practices to ensure all students receive an education that is equitable and inclusive.

CHAPTER II: LITERATURE REVIEW

This literature review focuses on the scholarship of culturally responsive pedagogy and the extent of its effective incorporation in K16 educational institutions. First, the literature review begins by examining overarching federal policy initiatives that elucidate a more urgent need as well as an avenue for culturally responsive pedagogy. Second, it delves into a more detailed explanation of the theoretical frameworks and conceptual model that will be utilized in this study. Third, it highlights the foundations of culturally responsive pedagogy by examining its key tenets as developed by several major contributors to the scholarship. Fourth, it evaluates how culturally responsive pedagogy in practice impacts student outcomes academically, socially, and emotionally. Fifth, it examines teacher characteristics that promote or prevent the implementation of culturally responsive pedagogy. Lastly, it investigates the ways in which school leadership and school environment can foster the awareness and capacity building of their teachers so that they may effectively engage in the use of culturally responsive pedagogy.

Key Federal Policies that Opened the Door to Culturally Responsive Pedagogy

Currently, the United States' education epoch is transitioning from a highly restrictive and centralized era under Zero-Tolerance policies and No Child Left Behind (NCLB) to a flexible and decentralized era under the Every Student Succeeds Act. Former President Obama signed ESSA into law on December 10, 2015 in response to educators and families who were clamoring for reform that would positively impact college and career readiness (U.S. Department of Education, 2017). ESSA aims to promote equitable outcomes for underserved students in order to increase all students' opportunities to succeed in life beyond high school. In light of its autonomous nature, it is unclear whether or not ESSA will help

minimize opportunity gaps, widen existing gaps, or generate new gaps. However, if administrators and educators are expected to implement education policy, then it is up to policy makers to design policy that effectively addresses the educational needs of all students. The next sections examine policies related to two significant elements of education, teacher quality and school discipline, which often lead to inequitable practices and opportunity gaps for specific student groups, then seeks to explore how ESSA may either promote or prohibit equitable outcomes for marginalized students particularly as it relates to the adoption of culturally responsive pedagogy.

Zero-Tolerance Policies. The proliferation of school violence in the 1980's and 1990's led to the Gun Free Schools Act of 1994 which mandated school administrators to expel students for one year if caught in possession of a firearm, to report students caught with a weapon of any kind to the juvenile justice department, and to exercise expulsion discretion on an individual basis (Siman, 2005). It was not long before mandatory punishments were also stipulated for alcohol, drugs, tobacco, weapons of any kind, and for vague infractions such as disrespect or disruptive behavior (Gregory, Skiba, & Noguera, 2010; Skiba et al., 2011). At the time, these stringent policies, commonly referred to as zero-tolerance policies, seemed necessary for the safety and security of teachers and students. However, it soon became clear that these severe measures were implemented inequitably; as a result, they disproportionately affected students from marginalized communities (Kang-Brown, Trone, Fratello, & Daftary-Kapur, 2013).

Unfortunately, zero-tolerance policies were supported at the federal, state, and district levels allowing their deleterious effects to scale and spread nationwide. Over twenty years later evidence indicates that Black students, Latino students, special education students, and

students from low socioeconomic households were suspended or expelled at higher rates than their White counterparts (Balfanz, Byrnes, & Fox, 2014; Skiba et al., 2011). According to the Civil Rights Data collection, special education students were twice as likely to be suspended than mainstream students and Black students were three times as likely to be suspended than White students (U.S. Department of Education Office for Civil Rights, 2014). The study found other incidents of inequities that impacted Latino students, Native American students, Asian Pacific Islander students and girls of color, citing incidents of disproportionate discipline that began as early as preschool.

Zero-tolerance policies contribute to opportunity gaps because they interrupt student attendance and academic progress, which negatively impacts academic achievement (Kang-Brown et al., 2013; Skiba, Arredondo, & Rausch, 2014). Furthermore, absence from the classroom means students miss out on content, classroom connection, and become increasingly disengaged (Balfanz et al., 2014; Fabelo et al., 2011). Students who feel disconnected from the learning environment may wrongfully or prematurely assume that school is “not for them”. Declines in academic achievement, engagement, and sense of belonging each contribute to the likelihood of dropping out of high school. In fact, suspension from school not only disrupts student learning, it can also have long term consequences such as increased probability of retention, one of the most powerful predictors for dropping out of school entirely (Kang-Brown et al., 2013). Kang-Brown et al. (2013) discuss a national longitudinal study, which found that students were 68% more likely to drop out of school if they had been previously suspended. Another study suggests that students are three times more likely to have contact with the juvenile justice system within one year after a suspension or expulsion (Fabelo et al., 2011). This increased probability of dropping out of school or

interfacing with the juvenile justice system places students on a criminal path to prison instead of a college path to a profession. Thus, zero-tolerance policies play an integral role in diminished opportunities for historically marginalized students.

As with many federal initiatives, the interpretation and implementation of zero-tolerance policies varied and ultimately led to widespread inequitable outcomes for students. In an effort to understand how these inequities came to fruition, researchers point to causes such as implicit bias, stereotypes, racial tension, and cultural insensitivity on the part of teachers and administrators (DeMatthews, 2016; R. J. Skiba et al., 2011). When implicit bias and cultural ignorance are present, it is quite possible for faculty to unknowingly engage in discriminatory discipline practices that negatively impact students. Moreover, the discretionary aspect of zero-tolerance policies creates subjective situations in which teachers can delve out discipline indiscriminately (DeMatthews, 2016; Gregory et al., 2010; Siman, 2005; Skiba et al., 2011; Skiba et al., 2014). The liberal nature of zero-tolerance policy implementation in many schools makes it possible for inexperience, prejudice, and even retaliation to become a factor in the disciplinary decisions of teachers and administrators, thus adversely impacting students generally, and marginalized students specifically.

No Child Left Behind. One of the most influential factors concerning the academic progress of students is the teacher, which is why teacher quality is a significant component of opportunity gaps for marginalized students. No Child Left Behind (NCLB) which began in 2001 attempted to address teacher quality by requiring that all teachers in core academic subjects were highly qualified by the 2005-2006 school year. A highly qualified teacher was defined as possessing full certification, bachelor's degree, and demonstrating competence in subject knowledge and teaching (Liston, Borko, & Whitcomb, 2008). Unfortunately, there

were several unforeseen barriers and consequences to this well-intentioned policy. More qualified teachers were drawn to schools that offered competitive salaries, as well as safe and secure working conditions (Darling-Hammond, 2004). The lack of incentives to work in low income, high minority schools led to increased placement of inexperienced and underqualified teachers in schools with the most need. The challenging environments and limited professional support produced higher attrition rates that translated into a financial drain on the very schools struggling to maintain financial viability (Darling-Hammond, 2007; Wayne, 2002). When students experience a revolving door of novice teachers, it becomes challenging to prevent opportunity gaps from deepening.

The federal government, independent agencies, policymakers, researchers and educators support the premise that teacher quality is critical to student achievement; however poor students and students of color are consistently underserved because they often lack the resources they need the most, high quality teachers (Akiba, LeTendre, & Scribner, 2007; Peske & Haycock, 2006). The consequences of this neglected resource damages students' ability to learn in a way that truly sets them up for success. The low expertise of teachers within many of these schools creates a culture of incapacity in contrast to a culture of effective collaboration that exists when teachers are in the presence of highly qualified and effective teachers (Darling-Hammond, 2004). This ineptitude, or lack of collective efficacy has financial repercussions as well because school leaders have to invest money on training in addition to operational costs that accompany high levels of attrition (Darling-Hammond, 2004).

Students in low income areas, students of color, and Spanish speaking students are more likely to experience teachers who are under-qualified in a plethora of ways (Borman &

Kimball, 2005). Firstly, students from these populations are often subjected to inexperienced teachers who do not possess the capacity to serve high need demographics. Researchers indicate that teachers are far less effective in their first two years of teaching, however by their third year the quality gap is minimized (Peske & Haycock, 2006; ESSA Educator Equity, 2015). It stands to reason that new teachers are less adept at curriculum competence, classroom management, and tried and true teaching strategies that elicit positive academic outcomes for students. Yet, Peske and Haycock (2006) found that children in high-poverty schools and children in high minority schools are almost twice as likely to be taught by novice teachers.

In addition to deficits in teacher experience, poor and minority students are also subjected to teachers who lack full certification. Although certification does not guarantee teacher quality, it is an indicator of content and skills preparation, and studies have shown that certification is the second strongest predictor of math and reading achievement after teacher experience (Darling-Hammond, 2004). In many cases teachers with emergency credentials or no credentials at all are placed in high needs schools and are unable to meet the needs of their students (Darling-Hammond, 2007; Peske & Haycock, 2006). One California study found that teachers who lacked full certification did not feel prepared to teach students, were not as effective, and were particularly inept at addressing the needs of emergent bilingual students (Friedlaender & Frenkel, 2002). When teachers themselves doubt their ability to successfully educate students, it becomes painfully clear why opportunity gaps for their students are not closing.

Similarly, in low-income urban schools, teachers are often out-of-field teachers (Wayne, 2002). An out-of-field teacher is a teacher who does not have a degree in the subject

s/he is teaching which makes it difficult for them to transmit expertise to students. In 2002, Wayne (2002) conducted a study that examined college entrance scores and college ratings to ascertain how academic indicators impact teacher quality. While the findings related to entrance examination scores were not statistically significant, the results of the college ratings were. The results of the study revealed that the “proportions of teachers who graduated from institutions rated either 'minimally difficult' or 'noncompetitive' were 21 percent and 39 percent in low- and high-poverty schools, respectively” (Wayne, p. 8, 2002). If a teacher is struggling to learn material that is not familiar to them, it stands to reason that it will be challenging for them to teach students in deep, meaningful, or engaging ways. High income and predominantly White middle-class students have the benefit of being educated by teachers who are fully certified and who hold degrees in their subject matter, ensuring that they have greater likelihood of content comprehension and skill development (Orfield & Lee, 2005; Akiba et al., 2007). Yet, this basic right is denied to the very students who need it most, further exacerbating opportunity gaps.

Every Student Succeeds Act. ESSA seeks to redress the grievances generated by zero-tolerance policies by making the design of secure and safe schools a collective responsibility that involves parents, community members, teachers and school administration. Under ESSA, parents and community members can play a critical role in shaping school climate and safety policy (The Leadership Conference Education Fund, 2016). Title I focuses on accountability, planning, and reporting and requires states to create accountability measures to evaluate the degree to which schools are educating and caring for the well-being of their students. School climate and safety is one measure that schools can include. The goal is for schools to demonstrate a reduction in suspensions, instances of bullying, and inequitable

discipline practices that have historically impacted students of color, special education students, and emergent bilingual students. Every year a report card that communicates statistics related to number of suspensions, expulsions, and violent incidents among a number of indicators in an effort to hold schools accountable for visible changes in school safety will be released and available to the public. And in order for schools to receive Title IV funding they must be safe, secure, supportive, substance-free, and inclusive of parents in the design and implementation of their program.

In terms of teacher quality, ESSA eliminated the “highly-qualified” teacher requirement and now states have the freedom to design plans that ensure teachers possess state certification and licenses in order to receive Title 1-A funds. All other prerequisites to ensure teacher effectiveness are left at the discretion of individual institutions, ideally with the input of multiple stakeholders and the aim that all students are supported in the achievement of high academic standards (US Department of Education, 2017). For example, California’s Local Accountability and Control Plan (LCAP) is a plan that illustrates goals, strategies, resources, and services needed to improve positive outcomes for all students, and the measures of accountability include input from multiple stakeholders in the community (California Department of Education, 2018). The American Federation of Teachers (2016) is hopeful about the flexibility and freedom that comes with ESSA, which allows for state control, broadens evaluation of school performance, and focuses on college and career readiness for all students (Educational Testing Service, 2016). Educator voice, growth-oriented teacher evaluation opportunities, improvement focused student assessments, and student-centered initiatives that are collaboratively designed are what proponents of ESSA envision (Charnov, 2016). ESSA underscores evidence-based interventions, particularly in

low performing schools that have not demonstrated student progress, which could likely impact teacher quality (US Department of Education, 2017). By placing an emphasis on highly effective rather than highly qualified teachers, ESSA has the potential to minimize opportunity gaps for marginalized students. One way that teachers can learn to be highly effective is through the use of culturally responsive pedagogy.

Theoretical and Conceptual Frameworks

ESSA is a recent policy, and one challenge of policy initiatives is that they are rarely framed with a critical lens or framework to help situate phenomena for the purpose of comprehension, explanation or prediction. Due to its flexible nature ESSA does provide an avenue for culturally responsive pedagogy, however, in order to better understand how to build awareness and capacity for its use, an understanding of the theory behind the pedagogy is needed. Theoretical frameworks are imperative to the focused collection and analysis of data during the course of mixed methods study. Two theories, Critical Race Theory (CRT) and Self-Efficacy Theory (SET) will be utilized in this mixed methods research design and are rooted in two broader theories, Social Science Theory and Transformative Paradigm Theory, respectively. CRT and SET provide a means for critical analysis of teacher's ability to teach in a culturally responsive manner that serves all students' academic and social development. This section concludes with a conceptual model that discusses the intersectionality of backgrounds and beliefs, and its impacts on culturally responsive classroom behavior.

Critical Race Theory

CRT places emphasis on the theory, policies, structure, and institutions that adversely impact marginalized groups with the goal of promoting societal change. Critical Race Theory

(CRT) developed from the Critical Legal Studies movement of the 1970's, a movement which criticized the legal system's propensity to serve the interests of the wealthy and powerful (Harris et al., 2012; Tate, 1997). CRT is now used as a theoretical lens in a myriad of subject areas including education. The central tenets of CRT are as follows: the centrality and intersectionality of race and racism, the challenge to dominant ideology, the commitment to social justice, the centrality of experiential knowledge, and the interdisciplinary perspective (Solorzano, 1997; Solorzano & Bernal, 2001; Solorzano, Villalpando, & Oseguera, 2005; Yosso, 2005; Zamudio et al., 2011). Teachers who critically examine the institutional and structural racism that persists in education are more inclined to become social justice educators who actively work against systemic oppression while working for enfranchisement marginalized and oppressed groups. Below is a brief overview of each of the tenets and an explanation of their significance in the education realm.

The Centrality and Intersectionality of Race and Racism. Critical race theory posits that race and racism are inextricably entrenched in society and are central components in the interpretation and explanation of how individuals and institutions function on a daily basis. Despite acknowledging that race and racism are at the center of the theory, critical race theorists believe in the intersectionality of racism with other forms of oppression such as gender, sexuality, socioeconomic status, and immigration status. Race and racism are endemic to the educational system which is comprised of individuals, structures, institutions, and policies that regularly produce and maintain inequitable practices for marginalized students. This tenet asks educators to acknowledge the impact of racism and its interconnected forms of oppression and recognize the existence of other sociocultural ideologies and perspectives.

The Challenge to Dominant Ideology. Critical race theory challenges the dominant narrative that lauds US society as color blind, merit-based, objective, race neutral, and an equal opportunity provider. Instead, it singles out systems of privilege that perpetuate the cycle of unearned rewards to the powerful and self-interested under the guise of meritocracy and equality, and it rejects dominant ideology surrounding culture and intelligence. One way to challenge the dominant ideology in education is to recognize and incorporate diverse definitions of knowledge and knowledge construction. Assumptions are often made regarding intelligence, capability, academic success, or displays of cultural and social capital, when in reality many of these concepts are multidimensional, contextual and subjective. This tenet asks educators to disrupt ideology that buoys systems of privilege and deficit-based assumptions that routinely paint culturally and linguistically diverse students in a negative light. It can be achieved by allowing students to critique and challenge destructive descriptions and explanations of their achievement capability, and then collectively re-defining what it means to be academically and socially successful.

The Commitment to Social Justice. CRT recognizes the myriad of oppressive forces that exist for individuals based on their race, gender, sexuality, or other aspects of their cultural identity, and actively works to combat these forces with multiple forms of resistance. The goal is to fight for equity and fairness in all levels of society. This tenet encourages educators to raise students' critical consciousness in regard to the historic and contemporary realities of societal injustice, then help students to develop a sense of individual agency, interrupt injustice, and enact positive change for the community.

The Centrality of Experiential Knowledge. CRT honors the experiential knowledge of culturally and linguistically diverse individuals who are better positioned to illustrate the

impact of race, racism, and other forms of oppression on their lives. The lived experiences of people of color can be captured through storytelling, biographies, family histories, interviews, and more, and these experiences offer counter-narratives to traditional stories that are often told from the perspective of the perpetrator, who cannot possibly understand or appropriately analyze the impacts of racial subordination. This tenet reminds educators to invite the lived experiences of their students into the classrooms. Rather than engaging in the banking method of filling students with knowledge, educators can acknowledge and incorporate the culture specific knowledge, history, traditions, values, and life experiences that can connect and enhance prescribed subject matter.

The Interdisciplinary Perspective. CRT delves into historical and contemporary contexts to analyze race, racism, and related forms of oppression. The analysis is made more robust by CRT's decision to draw from other social science and humanities scholarship, including history, sociology, ethnic studies, women's studies, theater and a host of other disciplines. This tenet prompts educators to adopt an interdisciplinary approach to carry out the examination of educational and societal inequities past and present, particularly as they relate to access to high quality education, inclusion in curriculum, and valuation of non-dominant cultural capital.

Critical Race Theory has several branches that allow for more specific acknowledgment and analysis of a myriad of cultural identities. LatCrit Theory focuses on systemic elements that impact Chicano/a people that is layered with language acquisition, accent, and immigration status to name a few (Yosso, 2005). Similarly, TribalCrit Theory examines the impact of colonization and displacement on Native American populations, AsianCrit Theory analyzes historical nativism, controlled immigration flows, and the divisive

use of the “model minority” myth, and FemCrit Theory focuses on the intersectionality of race and gender and how it manifests itself in the gendered oppression of women of color. Perhaps a less well-known derivative of CRT is WhiteCrit Theory which delves into race and racism as it pertains to White people and the nature of White privilege (Yosso, 2005; Solorzano & Bernal, 2001; Harris et al., 2015). In light of its nuanced blend of critical pedagogy, race, and resistance, critical race theory is a cornerstone of culturally responsive pedagogy, and helps establish clear boundaries for the scope of the study. While CRT helps to provide a foundational understanding of the “why” of culturally responsive pedagogy, Self-Efficacy Theory provides a framework for educators to explore the “how”.

Self-Efficacy Theory

Albert Bandura developed Self-Efficacy Theory (SET) in the late 1970’s, and it was used to study the predictive power of cognitive ability on behavioral change (Bandura, 1977). It was initially used in the field of Psychology, but has proliferated into other fields of academia, including education. In order to successfully integrate CRP practices into classroom instruction and management, teachers must develop self-efficacy beliefs around their ability to engage in teaching and learning that acknowledges the lived experiences of their students in an effective and equitable way. Bandura (1977) asserts that, “Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences” (p. 194). Although these efficacy expectations may differ in magnitude, generality, and strength, they can have a profound impact on confidence levels and completed actions. This theory indicates that individuals’ beliefs in their own abilities can translate into behavioral change. There are four main information sources, also referred to as treatments, that assist in the development of self-efficacy beliefs:

performance accomplishments, vicarious experience, verbal persuasion, and physiological arousal (Bandura & Adams, 1977). Below is a brief overview of each treatment, followed by an explanation of how CRT and SET collectively offer theoretical frameworks aligned with CRP.

Performance Accomplishments. Performance accomplishments are the most powerful information source when it comes to sustainable behavioral change. With each successive accomplishment and progress towards mastery, individuals gain greater self-efficacy and increased confidence in their ability to complete similar tasks in the future. Likewise, when individuals experience failure at a given task, it has the power to decrease self-efficacy beliefs, particularly if the failure occurs early on in the process. Repeated success in performance accomplishment can strengthen an individual's self-efficacy so that even when mishaps or failures occur, they are not attributed to an inability of self. Research suggests that these episodes of mastery have the ability to improve self-efficacy in other areas as well. Participant modeling, performance desensitization, performance exposure, and self-instructed performance are methods that can help an individual achieve higher degrees of accomplishment which translate to increased self-efficacy.

Vicarious experience. Although the efficacy expectations are not as strong as those generated during performance mastery, vicarious experience is another way for an individual to develop self-efficacy. Both live and symbolic modeling provide an individual with the opportunity to witness another individual complete a task successfully. By witnessing the accomplishment of others, the individual feels a greater sense of his or her own ability to complete the same task. Individuals benefit more from seeing the task completed through effort rather than ease. In addition, individuals benefit more from seeing a diverse range of

people successfully completing the task. Simply by witnessing the success of others, individuals enhance perceptions of their own ability to do the same.

Verbal Persuasion. Verbal persuasion is probably the most accessible information source for developing self-efficacy, however it is not the most effective. It operates under the assumption that individuals can develop self-efficacy simply by hearing positive comments, exhortation, suggestions, and motivations surrounding their ability to accomplish a given task. However, because individuals have not experienced mastery or a sense of accomplishment, it is harder for them to believe that they are capable of achieving the task. Verbal persuasion is more effective when individuals are also given necessary tools and structures to influence greater success because they will exercise greater effort in their attempt to achieve the task.

Emotional Arousal. Physiological arousal is a method whereby the individual uses techniques to help regulate feelings of anxiety and vulnerability. Attribution, relaxation, biofeedback, symbolic desensitization, and symbolic exposure can help an individual escape negative physiological arousal and develop self-efficacy. However, much like verbal persuasion and vicarious experience, physiological arousal is not as an effective of a method as performance accomplishments.

There is value added from the interplay of Critical Race Theory and Self Efficacy Theory. These two theoretical frameworks complement each other because they address beliefs and behavior, respectively. The critical examination of self and society engendered by CRT leads to greater insight and wisdom related to the individual, structural, and institutional racism that often impacts education, particularly for marginalized students. Likewise, exploration of the predictive power of self-efficacy beliefs and use of the four main information sources, or treatments, provides a means for positive behavioral change. In order

to successfully integrate CRP practices into classroom instruction and management, teachers must develop self-efficacy beliefs around their ability to engage in teaching and learning that acknowledges the lived experiences of their students in an effective and equitable way. Based on the tenets of CRT and treatments of SET, in order for teachers to truly develop their self-efficacy around culturally responsive pedagogy, it is imperative that they conduct a critical analysis of self, others, and society and engage in performance accomplishments with high frequency and increasing degrees of magnitude. Increased knowledge and personal mastery experiences will offer the greatest impact in self-efficacy beliefs, thus a greater impact on culturally responsive behavioral change.

Studies indicate that teachers, whether consciously or unconsciously, have different expectations of students based on their race and socioeconomic status, and these expectations stem from beliefs about student capability (Baron et al., 1985; Winfield, 1986). Winfield (1986) found that teachers expectations are often higher for white students and middle-class students, which has the ability to impact the degree to which they challenge and develop the intellectual capacity of low income or culturally diverse students. Villegas (2007) found that pre-service teachers often enter the profession possessing racial and ethnic bias that leads to negative views of cultural diversity in the classroom and low expectations for students of color. Gay (2010) asserts that the cultural disconnect between the lived experiences of teachers and students, as well as mass media's portrayal of racial and ethnic groups are significant factors in teachers' negative beliefs about students of color and students from low socioeconomic backgrounds.

Studies indicate that teacher expectations for students are influenced by their beliefs about students, and once established they tend to dictate how teachers treat and interact with

students (Villegas, 2007). This becomes problematic if initial beliefs about students are dominated by deficit-based notions. Many educators hold deficit beliefs about diverse students and their families which is a contributing factor to failed attempts at education reform efforts, particularly those that were specifically designed to address inequitable outcomes (Nelson & Guerra, 2014). Deficit beliefs fall into the category of equity traps, or misguided assumptions and ways of thinking that cause educators to remove or lower their expectations of academic success for students of color (Mckenzie & Scheurich, 2004). Deficit thinking perpetuates the notion that students of color come from families who do not value education, are less motivated, and are products of failed communities (Mckenzie & Scheurich, 2004, Skrla et al. 2008; Sleeter, 1996). When educators possess these beliefs, it can impact their behavior toward diverse students. Similarly, distorted beliefs and misconceptions about culturally diverse students can result in teaching and learning experiences that are ineffective and potentially damaging to students (Gay, 2010; Nieto, 2000). Unlike cognitive knowledge, an individual's personal beliefs do not require external validation or consistency, as such, personal beliefs have a stronger influence on behavior than professional knowledge, and are much more resistant to change (Bandura, 1982; Bandura, 1986; Nespor, 1987; Bruner, 1996; Pajares, 1992). For this reason, identifying and interrupting beliefs and bias that are deleterious for students can have positive impacts on their interactions with students.

Conceptual Model: The Intersectionality of Background, Beliefs, and Behavior

There is a perception of teaching that leads one to believe it is a profession based on knowledge, objectivity, and order. In reality, teaching is a personal endeavor, vulnerable to error, subjectivity, and chaos. This Critical Intersectionality Framework attempts to illustrate the intersectionality of teachers' background, beliefs, and behaviors in an effort to understand

what measures are necessary to ensure equitable teaching and learning for all students.

Warren (2014) conducted a study on culturally responsive pedagogy and found that teachers' background, experience, and disposition impacted their interactions with culturally diverse students. An individual's background and cultural identity (race, ethnicity, gender, socioeconomic status, religious affiliation, physical ability, mental ability, parental level of education, cultural exposure, etc.) can impact the beliefs the individual will have about self and others. The Critical Intersectionality Framework illustrates how these beliefs or worldviews can impact an individual's behavior. The relationship is not unidirectional, in the sense that behaviors and interactions can also influence or reinforce beliefs which can result in a confirmation bias that perpetuates the potentially destructive belief. In an educational setting, the examination and interruption of negative beliefs and biases can translate into more positive classroom behaviors and interactions with students, a change that can have a dramatic effect on outcomes for culturally and linguistically diverse students, who are often adversely impacted by teacher beliefs and biases.

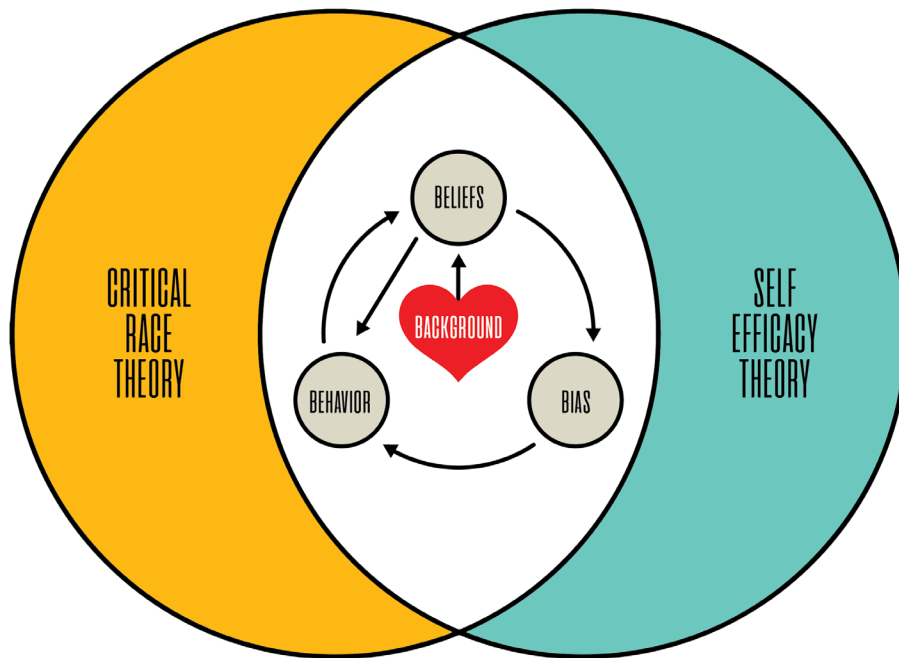


Figure 1: Critical Intersectionality Framework

Foundations of Culturally Responsive Pedagogy

Historically, the changing sociopolitical context often demands that education systems respond in order to meet the needs of all students. However, over sixty years after *Brown v. The Board of Education*, the 1954 Supreme Court case that put an end to state mandated racial segregation in public institutions, schools in the United States are more segregated and unequal than they have been in the past forty years (Orfield, 2009; Cowan Pitre, 2014). Prominent researchers have been integral to the development of educational approaches to specifically address growing concerns related to the education of culturally and linguistically diverse students. Several terms exist to describe the practice of culturally responsive education, including multicultural education, culturally relevant teaching, culturally responsive pedagogy, culturally inclusive pedagogy, and reality pedagogy.

Although there may be slight variations in description, these definitions all center on the notion that the consideration and incorporation of students' cultural heritage in their learning experience has significant impacts on their educational trajectory (Ladson-Billings, 1992; Banks, 1993; Montgomery, 2001; Gay, 2010).

Multicultural Education. Initially, the multicultural education movement advocated for the curricular incorporation of marginalized groups, such as people of color and women (Banks, 1993). James A. Banks, frequently cited as the father of Multicultural Education, asserts that this aspect of education reform was a byproduct of the Civil Rights Movement (Banks, 1993). When more people of color began to collectively and publicly advocate for the democratic ideals specified in the nation's founding documents, it was the impetus for reform that was designed to address the needs of students in newly integrated classrooms. In 1977, the National Council for Accreditation and Teacher Education adopted a multicultural education standard which allowed for its widespread dissemination in teacher preparation programs (Banks, 1993). Subsequently, Banks developed five dimensions of multicultural education: content integration, the knowledge construction process, prejudice reduction, equity pedagogy, and empowering school and social culture. These dimensions are still used to evaluate multicultural education courses in teaching credential programs nationwide (Banks, 1993; Ogletree & Larke, 2010; McAllister & Irvine, 2000). He believes these dimensions benefit all students, not only students of color, because they invite the educator to acknowledge students as whole beings, complete with past, present, and future identities.

Culturally Relevant Pedagogy. Perhaps a logical evolution of multicultural education was Gloria Ladson-Billings' seminal work on Culturally Relevant Pedagogy. She defines it as the practice of utilizing the students' culture "as a basis for helping students

understand themselves and others, structure social interactions, and conceptualize knowledge” (Ladson-Billings, 1992, p. 314). Ladson-Billings’ approach to culturally relevant pedagogy is three tiered (Ladson-Billings, 1995). First, she contends that student academic success is imperative. Academic development in a wide range of areas provides all students with an opportunity to meaningfully engage in a democratic society. Secondly, she emphasizes the importance of students’ possession of cultural competence, a quality that permits students to experience pride, see value, and learn through the lens of their cultural identity. She found that teachers who made a conscious effort to incorporate characteristics of cultural identity, home life, and parental capital observed greater student engagement and academic achievement. Lastly, Ladson-Billings’ explains that students need to establish and/or develop critical social consciousness that will enable them to challenge the existing social order. Students must be aware of present day inequities, be equipped with the tools to change them, and be empowered to do just that (Ladson-Billings, 1995). Education that is responsive to the current students in the classroom is what distinguishes culturally relevant pedagogy from multicultural education, which can be utilized regardless of classroom diversity (Rychly & Graves, 2012).

Culturally Responsive Teaching and Derivatives. A related set of practices distinguished by Geneva Gay is known as culturally responsive teaching. Gay (2010) defined Culturally Responsive Teaching as “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (Gay, 2010c, p. 31). Geneva Gay has done extensive work to emphasize the importance of teaching through cultural diversity, managing the politics that accompany multicultural education, and cultivating cultural critical

consciousness (Gay, 2002; 2003; 2005; 2013). Gay focuses on instructional practices and teacher characteristics that result in a culturally responsive education for all students, and tends to place emphasis on teacher identity, positionality, and the widening of cultural awareness (Aronson & Laughter, 2016). The expansion of culture to include students' race, ethnicity, beliefs, motivations, and ways of being slightly distinguish Gay's work from the seminal work of Ladson-Billings.

Romero, Arce, and Cammarota (2009) developed Barrio Pedagogy to specifically characterize culturally responsive practices that are geared toward Latino/a student achievement. Borrowing tenets from Paulo Freire, barrio pedagogy consists of problematization, critical reflection, and the authentic analysis of self, family, and community realities. Similarly, Chris Emdin's (2011) work, rooted in culturally relevant teaching and critical pedagogy, has gained traction. He has coined the term reality pedagogy and utilizes a five-step method to implement it, known as the 7 C's of reality pedagogy: cogenerative dialogues, coteaching, cosmopolitanism, context, and content. Emdin more assertively delineates student agency as a means for culturally responsive education. And, rather than merely explaining the *why* of reality pedagogy, he is intentional about providing educators with the much sought after *how*. Despite slight variations in the terminology and interpretations, these researchers argue that culturally responsive pedagogy has proven to be a powerful method with the ability to positively impact opportunity gaps in education.

More recently, Zaretta Hammond, author of *Culturally Responsive Teaching and the Brain*, has built on the work of Ladson-Billings and Geneva Gay, and taken it one step further by integrating neuroscience to increase the learning capacity of culturally and linguistically diverse students. Hammond has created numerous frameworks and protocols which are

designed to help educators shift mindsets and develop practical expertise that go beyond a set of strategies and tools and result in sustainable implementation of Culturally Responsive Pedagogy. Figure 2 demonstrates one such framework where Hammond distinguishes the tenets and outcomes of multicultural education, social justice education, and culturally responsive pedagogy to help teachers make meaning of their purpose.

DIMENSIONS OF EQUITY As equity-focused educators, it is important to distinguish between three key areas in education: <i>multicultural education</i>, <i>social justice education</i>, and <i>culturally responsive teaching</i>. Too often the terms are used interchangeably when they are not. Below is a simple chart to help you understand the distinctions between them. A key point to remember, only CRT is focused on the cognitive development of under-served students. Multicultural and social justice education have more of a supporting role in culturally responsive teaching.		
MULTICULTURAL EDUCATION	SOCIAL JUSTICE EDUCATION	CULTURALLY RESPONSIVE PEDAGOGY
Focuses on celebrating diversity	Focuses on exposing the social political context that students experience	Focuses on improving the learning capacity of diverse students who have been marginalized educationally
Centers around creating positive social interactions across difference	Centers around raising students' consciousness about inequity in everyday social, environmental, economic, and political aspects of life	Centers around the affective & cognitive aspects of teaching and learning
Concerns itself with exposing privileged students to diverse literature, multiple perspectives, and inclusion in the curriculum as well as help students of color see themselves reflected.	Concerns itself with creating lenses to recognize and interrupt inequitable patterns and practices in society.	Concerns itself with building resilience and academic mindset by pushing back on dominant narratives about people of color.
Social Harmony	Critical Consciousness	Independent Learning

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Figure 2. Dimensions of Equity Framework

Hammond's theory, research, and practice of Culturally Responsive Pedagogy and, particularly its connection to the development of intellectual capacity, serve as a resource for educators who are intent on operationalizing this pedagogy more effectively.

Culturally Responsive Pedagogy in Practice

The current literature on culturally responsive pedagogy explicates its use in primary, secondary, and university levels of education, as well as its positive impact on a wide range of cultural groups (Ladson-Billings 1995; Gay, 2002; Peck, 2010; Nzai & Reyna, 2014). The

scholarship suggests that the implementation of culturally responsive practices has socioemotional and academic outcomes that narrow opportunity gaps, and by association, academic achievement gaps.

Student Engagement. One of the most salient effects of culturally responsive pedagogy is its ability to ignite interest and engage students in their own cognitive development (Ramirez, 2012; Ladson-Billings, 1992; Hammond, 2014; Hamdan Alghamdi, 2014). A mixed methods study found that African American students preferred integrated culturally relevant teaching to non-culturally relevant teaching because they enjoyed having teachers who knew, honored, and valued their cultural differences (Sampson & Garrison Wade, 2010). Students felt connected to content, comfortable in the classroom setting, and equally valued by their educators and peers. Similarly, evidence suggests that exposure to culturally relevant texts allows students to experience deep and diverse connections between their family background and the subject matter content (Ramirez, 2012; Ladson-Billings, 1992). The learning can validate history and cultural experiences for some students while expanding the sociopolitical content repertoire for other students, particularly when the exposure to such content is plentiful and varied throughout the course of the year (Shaw, 2016). Perhaps, more importantly, culturally responsive pedagogy can increase students' development of intellectual capacity, which can help transition culturally and linguistically diverse students from dependent learners to independent learners (Hammond, 2014).

Student Mental and Emotional Health. In addition to increasing cognitive development through student engagement, culturally responsive pedagogy produces an environment that contributes to mental and emotional health for students. The educational experience for students of color in America can produce psychological distress that negatively

impacts their academic and personal development (Cholewa et al., 2014). Researchers contend that when students experience culturally responsive pedagogy there is a decrease in anxiety, a decrease in psychological distress, an increase in comfort level, an increase in psychological well-being, an increase in student motivation, and a positive change in racial attitudes (Nzai & Reyna, 2014; Cholewa et al., 2014; Okoye-Johnson, 2011). Furthermore, acknowledgement and incorporation of culturally relevant content helps students cultivate positive racial identity, which is a crucial attribute to combat society's pervasive and negative messages regarding historically marginalized students (Singleton, 2015). Thus, an intentional level of conscious and responsive identity recognition on behalf of educators can help to reduce the internalized oppression students often feel as a result of growing up under the pressures of a hegemonic education system that routinely values the lived experiences of the dominant culture (Tatum, 1997; Singleton, 2015; Khalifa, 2013).

Student Behavior. When students begin to experience this combination of cultural competence and confidence, it manifests itself in additional positive habits that contribute to marked improvements in behavioral choices. For instance, studies indicate that incorporating culturally responsive pedagogy resulted in increased attendance and decreased disciplinary infractions (Peterson, 2014; Dee & Penner, 2016). The research demonstrates that when students' cultural heritage is acknowledged and honored, they are more inclined to feel a sense of belonging that produces, not only a desire to be a part of the community, but also motivation to remain a part of the community by refraining from negative behavior patterns. Students who were previously characterized by their negative reputation were able to reverse the narrative and change their academic trajectory once they began to view themselves and

their cultural identity in a positive light (Worthy, Consalvo, Bogard, & Russell, 2012, Ladson-Billings, 1992).

Student Academics. The culturally responsive pedagogy scholarship surrounding engagement, positive racial identity, motivation, increased attendance and decreased disciplinary infractions, creates a foundation for the logical consequence of improved academic achievement for students of color. Its use has repeatedly resulted in elevated vocabulary acquisition (Nzai & Reyna, 2014), higher reading and math scores (Brayboy & Castagno, 2009; Powell et al., 2016), improved literacy rates (Ladson-Billings, 1992), improved grades, an increased number of credits earned for underrepresented and underserved students (Peck, 2010; Sampson & Garrison-Wade, 2010; Cati, Lopez, & Morrell, 2015; Peterson, 2014; Dee & Penner, 2016), and improved college readiness and access (Welton & Martinez, 2014). This research encompasses students from elementary, middle, high school, and college, and is representative of various cultural identities, including African American, Latino, and American Indian/Alaska Natives, the three ethnic groups in most need of academic attention (NCES 2015; CEPA, 2016).

Student Empowerment. Once academic success improves, not surprisingly, the context of culturally affirming classroom environments and school policies leads to self-advocacy and student empowerment (Tintiangco-Cubales et al., 2015; Sampson & Garrison-Wade, 2010). Students are more inclined to exercise their student voice and experience increased student agency when who they are as individuals is esteemed by their teachers (Cati et al., 2015; Sampson & Garrison Wade, 2010). For instance, Ramirez and Jimenez-Silva (2015) found that culturally responsive teaching through performance poetry helped Latino youth by validating their identity, honoring their community, and providing a transformative

experience that empowered students to impact their community. When positive cultural identity has been established via the framework of culturally responsive pedagogy, students build capacity to develop critical consciousness and social justice convictions that lead to rejection of the status quo (Ladson-Billings, 1995; Banks, 1995; Gay, 2002; Chubbuck, 2008; Cati et al., 2015, Cammarota & Romero, 2006). This research indicates that by examining their positionality in the world students can become change agents to combat systemic oppression.

Educator Capacity. In order for student transformation to occur, educators may need to acknowledge their role in the perpetuation of inequitable practices. Significant contributors to opportunity and achievement gaps are teachers and administrators who fall into equity traps, or implicit biases and explicit prejudices regarding the abilities of students of color. The four most common equity traps are deficit thinking (having lower expectations for students of color), racial erasure (making statements like, “I don’t see color”), avoidance and employment of the gaze (teaching at low income schools to avoid administration and parent oversight), and paralogical beliefs and behaviors (teachers blame their destructive behavior on students) (McKenzie & Scheurich, 2004). When educators remain entrapped, culturally and linguistically diverse students are more likely to suffer the consequences of inadequate academic development.

Although all four equity traps can jeopardize students’ academic and social development, the long-term consequences of deficit thinking and paralogical beliefs and behaviors merit focused attention. Deficit thinking entails the assumption and belief that students of color are not capable of achieving at the same level of their white counterparts, and it has a significant impact on a teacher’s educational approach (Turner, 2014; Howard,

2007; Shields, Bishop, & Mazawi., 2005). Furthermore, when it is combined with paralogical beliefs and behaviors (in which teachers engage in destructive behavior then blame it on their students and their families), it can have devastating impacts on students (McKenzie & Scheurich, 2004).

Culturally responsive pedagogy can help transform teachers' assumptions about their students of color, so that students are considered to have funds of knowledge and assets worthy of recognition. In other words, instead of viewing students as half-filled cups, the teacher acknowledges that the entire cup is full, and values the cultural knowledge and life experience that all students possess. Once teachers open themselves up to become learners, it allows for students and parents to share their cultural knowledge and expertise (Pewewardy & Hammer, 2003; Brayboy & Castagno, 2009).

For example, Irizarry and Gonzalez (2007) collected culturally responsive pedagogy data on Puerto Rican students living in Chicago, Illinois, Springfield, Massachusetts, and Milwaukee Wisconsin, and discovered the significance of holding students to a higher standard and respecting the cultural capital of the Puerto Rican community; participants began to view teaching and learning as a reciprocal process between teacher, student, and the Puerto Rican community. By viewing students' families and the neighboring community as resourceful allies, teachers are less inclined to practice deficit thinking and paralogical behaviors, which allows for an enriching educational experience for students and teachers alike.

This widening of cultural aperture means teachers will be able to equitably identify students' academic ability as it pertains to special education and gifted programs. Cultural knowledge can minimize the overrepresentation of students of color and English language

learners in special education (Sullivan, 2011; Artiles, , Kozleski, Trent, Osher, & Ortiz, 2010; Green, 2005). This overidentification of marginalized students inhibits them from realizing their true potential. Cultural competence can also result in an increased number of African American, Latino, English Language Learners, low socioeconomic, and female students admitted to gifted and advanced programs in light of their current underrepresentation (Lakin, 2016; Ahram, 2011; Frye & Vogt, 2010). Unfortunately, when these decisions are left to teacher and parent referrals, as opposed to blind screening, many culturally and linguistically diverse students are overlooked. Thus, when effectively equipped, culturally responsive teachers and administrators refrain from making snap judgements that hastily and incorrectly categorize students.

Fundamental Characteristics for the Implementation of Culturally Responsive

Pedagogy

The above research indicates that in the absence of barriers and misuse, culturally responsive pedagogy has positive academic and socioemotional outcomes, and it is advantageous for educator consciousness and practice. The next section of the literature review will examine in detail specific teacher characteristics that lead to successful implementation of culturally responsive pedagogy. While it is beyond the scope of this particular study, it is important to understand that the education of students takes place in an ecosystem and in many instances teacher capacity is impacted by surrounding systems of support, thus the literature review includes a brief appraisal of institutional and leadership characteristics that help create a campus climate that is conducive to the implementation of culturally responsive pedagogy.

Teacher Characteristics. In most cases, successful large-scale improvement and reform require a collective of individuals who are committed to the cause (Elmore, 2000). Authentically transitioning into culturally responsive teaching requires what Wink (2010) describes as critical pedagogy. She explains how educators can learn, relearn, and unlearn practices in an effort to break free from traditional pedagogy and power. This type of thoughtful examination of teaching philosophy and methods can potentially assist educators in adapting their practice to meet the needs of a diverse society. Similarly, democratic pedagogy helps to break down the “harmful forces of marginalization” and “seeks to assure all communities of learners’ equity and access to both academic resources and power structures” (Wink, 2010, p. 144). It means recognizing each student’s heritage, background, and identity and intentionally engaging in curriculum design, class facilitation, and student-teacher relationships that serve to incorporate and empower each individual. By acknowledging and appreciating cultural differences in the classroom, teachers can help eliminate what Zamudio et al. (2010) describe as the reproduction of the very societal inequalities that permeate students’ lives.

Recognition of the practices that contribute to social inequities is the first step toward resolution. For instance, one unwelcome practice is the persistence of cultural racism. This occurs when “cultural images and messages that affirm the assumed superiority of Whites and the assumed inferiority of people of color,” continue to perpetuate the myth of meritocracy for White people, and internalized oppression for people of color (Tatum, 1997, p. 6). Without conscious acknowledgement of the salient social inequalities that are deeply intertwined with race in present day America, progress toward an equitable society will be limited at best (Zamudio et al., 2010). To compound the issue further, advancement may not be observed

until people authentically discuss racism as a collective. In order for this to occur, individuals must first admit that race impacts their lives 100% of the time, whether people are conscious of it or not (Singleton, 2015). Yet, racial consciousness only addresses one facet of a teacher's identity which is why complete sociocultural consciousness of self can help teachers identify how their background and beliefs influence their behavior and biases towards students (Gist, 2014; Hammond, 2015). These introspective revelations can lead to productive and positive counternarratives of marginalized students. Goldenberg (2014) offers specific steps for White teachers in urban classrooms that can benefit teachers of all races. First, critically self-reflect on how teacher race and student perceptions of teacher race's relationship to the dominant culture can impede student receptivity. Second, recognize and value the cultural capital that students possess instead of mistakenly viewing it as resistance to education. Yosso (2005) argues that students of color possess six types of cultural capital that need to be recognized, affirmed, and utilized by teachers: aspirational capital, linguistic capital, familial capital, social capital, navigational capital, and resistant capital. And third, transform theory into action by integrating the cultural capital of students into daily teaching and learning (Goldenberg, 2014). Once teachers become cognizant of their own sociocultural identity, understand how it impacts daily experiences and interactions, then engage in intercultural courageous conversations with others, they can establish initiatives for effective positive social change.

Upon developing a culturally conscious disposition, teachers still benefit from practical resources that can support their pedagogical growth. Several frameworks exist to describe and craft specific teacher characteristics of culturally responsive pedagogy. The common threads of these frameworks emphasize knowledge of self, knowledge of others, and

knowledge of the local, national, and global context. Analysis of personal belief systems and cultural heritage enables teachers to recognize the inherent biases and prejudice they bring into the classroom. Once they are made aware of certain iterations of cultural blindness, they may be compelled to learn more about the cultural backgrounds of their students. Bennett (2012) found that when field experiences with one-on-one interactions with students from diverse backgrounds followed by critical reflection led teachers to a more in depth understanding of culturally responsive pedagogy. When teachers have the ability to understand the diverse perspectives of their students it increases their likelihood of having high expectations for all of their students regardless of cultural background (Wlodkowski & Ginsberg, 1995; Ladson-Billings, 2001; Gay, 2002; Villegas & Lucas, 2002; Rychly & Graves, 2012). This sociocultural consciousness can help teachers develop a sociopolitical consciousness, thereby empowering them to disrupt educational and societal stereotypes often associated with students of color. Li (2013) identified three stages that lead to the development of a culturally responsive educator: cultural reconciliation, cultural translation, and cultural transformation. Additional teacher characteristics include the ability to adapt methods and materials, create culturally sensitive assessments (Montgomery, 2001), and have empathy and compassion for students (Rychly & Graves, 2012). These teacher characteristics can significantly impact student engagement and academic achievement (Gay, 2010; Ladson-Billings, 1995, Sleeter, 2001).

Previous researchers have found that culturally diverse students are often overrepresented in special education, school expulsions, and school suspensions. However, researchers have also discovered that professional development which emphasizes culturally responsive pedagogy can help teachers better understand the needs and abilities of their

students (Patton, 2011; Voltz et al., 2003; Hynds et. al., 2011). In an effort to minimize the underachievement gap among Black, Latino, and White students, the Los Angeles Unified School District (LAUSD) established the Culturally Relevant and Responsive Education (CRRE) Initiative in 2001, and in 2005, the LAUSD set out to conduct 399 hours of professional development that centered around culturally relevant and responsive education. As a result of its success, the consensus of the LAUSD school administrators was that CRRE should be rooted in all layers of teacher preparation, practice, and professional development (Patton, 2011).

Similarly, Project CRISP (Culturally Responsive Instruction for Special Populations), which was a three-day interactive seminar and twenty-six hours of team-based pedagogy exploration, sought to enhance teacher knowledge, skills, and comprehension in regards to properly distinguishing cultural learning differences, communication styles, and behavior patterns that are frequently misinterpreted for special education needs (Voltz et al. 2011). In essence, the goal was for teachers to understand how cultural differences are often recognized as a learning disability. Upon completion of the professional development, a significant number of general education teachers reported feeling “prepared to address the educational needs of culturally diverse students, collaborate with parents from diverse cultures, distinguish culturally-based learning differences from disabilities, and teach with a multicultural perspective,” in addition to experiencing increased knowledge of their students’ cultural backgrounds (Voltz et al., p. 68, 2011). A more recent study examined the use of a Culturally Responsive Instruction Observation Protocol (CRIOP) as a framework and evaluation tool. Teachers who participated in the study experienced three training sessions, on-site professional development, individual classroom coaching, and instructional planning

support which resulted in increased implementation of culturally responsive instruction over the course of the year and significantly higher student achievement in classes with higher degrees of implementation (Powell, 2016).

Professional development that helps teachers learn the skill of perspective taking and empathic concern can also result in a more culturally responsive teacher (Warren, 2014).

Warren (2014) describes this process in her Phases of Empathy Application model that suggests when teachers can imagine what a student is feeling in a particular moment, or engage in perspective taking, this develops into empathic concern and an application of new knowledge about the student that generates a response, then, by obtaining more information from the student the teacher is further informed on how best to respond to the student.

Additional successful methods include Hynds et al. (2011) study that repositioned the teacher student relationship in order to reconstruct the power balance. Through reciprocal teaching, educators began to view themselves as learners, view their Maori students as experts, increase cultural consciousness, acknowledge Maori student's need for dialog, recognize internal biases, and alter expectations of Maori students. Following a six-week online course and three-day summer institute, Pace (2015) found notable positive shifts in faculty attitudes towards culturally responsive pedagogy and went on to suggest that in order to achieve sustainable change, professional development needs to be authentically integrated in classroom practices and consistently revisited throughout the year. Alternatively, Hramiak (2015) indicated that gains in the use of culturally responsive pedagogy are also made when teachers voluntarily take ownership of their efficacy in diverse classrooms. She found that the use of questionnaires, focus groups, and semi-structured interviews with mentors led to adaptive teaching that effectively served culturally diverse students. Hence, the scholarship

indicates that a wide array of methods can be implemented to effectively cultivate culturally responsive pedagogy characteristics in teachers, and more importantly impact student opportunity and achievement.

School Characteristics. Due to the intimate nature of culturally responsive pedagogy, there are school specific attributes that enable teachers to safely and bravely utilize the approach. Richards, Brown, and Forde (2007) posited that in order to become more culturally responsive, institutions need to make considerable changes in the organization of the school, school policies and procedures, and community involvement. Reform can occur by being mindful of diversity, equity, and access as they pertain to the following: structure and composition of leadership, design and use of physical space, creation and execution of school policies and procedures that empower all students, and intentional partnerships with the families and communities' students. This type of institutional overhaul may appear extensive however, research indicates that it positively impacts student opportunities and achievement (Richards et al., 2007).

Alternatively, schools that are intentionally designed to meet the needs of culturally and linguistically diverse students have been able to achieve measurable success toward closing opportunity gaps. For instance, High School for Recording Arts (HSRA), Harlem Children's Zone (HCZ), exemplify culturally responsive schools where students of color have experienced improved academic outcomes (HSRA, Annual Report, 2015; Gardner & Mayes, 2013). Over 90% of students at these institutions are students of color, and 83% of students at HCZ and 99% of students at HSRA are from low socioeconomic backgrounds. Some students were formerly a part of the criminal justice system, kicked out of their previous school, categorized as homeless or highly mobile, and received special education services. Arise High

School is located in Oakland, California and their mission is to equip students “with the skills, knowledge, and agency to become highly educated, humanizing, critically conscious, intellectual, and reflective leaders” (ARISE High School, 2017). Over 95% of their students qualify for free and reduced lunch, almost 90% speak English as a second language, and more than 85% of their students are will be the first in their families bound for college. In traditional educational settings, these demographics are a prelude to low academic achievement, however, due to four key mediators used at Arise High School: Coaching, Teacher Leadership, Critical Inquiry Groups, and Professional Development, 85% of their students are admitted to two and four year institutions of higher education.

The June Jordan School of Equity (JJSE) is located in San Francisco, California and boasts social justice focus that embraces community. They serve predominantly working-class Black and Latino students with a mission to prepare students for college and equip them to make positive social change in the world around them (June Jordan School for Equity, 2017). At JJSE they utilize six pedagogical principles: warm demander, safe classroom community, knowledge of students, students as intellectuals, teacher as coach, and social justice curriculum. Many might consider these demographic realities a hindrance to effective teaching and learning, however both of these institutions support and challenge students in culturally responsive ways, and as a result, their students have experienced improved academic success and college readiness preparation.

The positive reports that emanate from these institutions is intimately connected to the school’s culturally responsive approach, which is often much more feasible in schools where teacher autonomy is prevalent. When teachers enjoy an extensive degree of freedom as they design and implement curriculum, it results in increased empowerment, professionalism, and

targeted curriculum that specifically addresses student needs (Pearson and Moomaw, 2005; Farris-Berg & Dirkswager, 2012), and specific types of institutions support greater levels of teacher autonomy. Presently, charter schools are often spaces that provide more opportunities for teacher autonomy because many of them are not under the same constraints as traditional public school institutions (Oberfield, 2016). In addition to increased independence, charter schools tend to foster a strong teacher community (Cannata, 2007), and this collegiality can be helpful with the proliferation of culturally responsive practices throughout the entire campus. This is not to say that culturally responsive pedagogy cannot occur in traditional school settings, it simply means that educators in traditional school settings are often forced to maneuver around content standards, district mandates, and standardized testing constraints that may make it much more difficult to implement (Elish-Piper, Mathews, & Risco, 2013).

Occasionally, when whole school reform is inhibited, focused programs or individual initiatives are implemented in an effort to counter hegemonic educational practices. The Social Justice Education Project (SJEP) supplements 11th and 12th grade state standards with curriculum that emphasizes critical race theory, critical pedagogy, and critical consciousness (Romero et al., 2009). SJEP began in 2003 and is now operating in four high schools in Tucson, where Latina/o students have experienced higher scores on the state exit exam and higher graduation rates than their non SJEP counterparts. In a similar fashion, a two-year study of African American middle school students who experienced self-affirming writing interventions found that the interventions positively impacted the racial achievement gap, particularly for low performing students (Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009). While these examples demonstrate ways in which culturally responsive education can infiltrate a school, through outside program intervention or controlled studies,

they do little to shed light on how this type of teaching and learning can be sustainably replicated.

Although teacher autonomy and grassroots dissemination of practice can lead to individual classroom reform, for whole school reform to occur, teachers, administration, parents, and community members must work collaboratively to ensure success for all students (Richard et al., 2007). In order for such a significant transformation to occur in educational institutions, wide scale professional development and focused institutional improvement surrounding culturally responsive pedagogy is needed (Sleeter, 2016; Pace, 2015; Voltz, Brazil, & Scott, 2003). As previously mentioned, Li's (2013) cultural approach to professional learning is carried out in three stages. The first stage, cultural reconciliation, invites faculty and staff to cultivate a deep understanding of their individual culture and that of their students. The second stage, cultural translation, involves developing cultural competence, tools, and best practices that help teachers more effectively develop students' cultural and intellectual capacity. The third stage, cultural transformation, hinges on teacher agency moving beyond the classroom to influence school policies, and to empower students to confidently navigate the constraints and opportunities inherent in their sociopolitical context (Li, 2013). Several researchers have identified various ways to deliver effective professional development centered on culturally responsive pedagogy with exercises ranging from the identification of perceived privilege, examination of cultural artifacts, summer institutes, online courses, ongoing professional development cycles, reciprocal teaching and learning, and knowledge co-construction, to name a few (Gallavan, 2004; Hynds et al., 2011; Pace, 2015; Patton, 2011; Voltz et al., 2003). Thus, educators and leaders have a plethora of resources to assist in institutionally supported culturally responsive reform.

Leadership Characteristics. Culturally responsive teacher characteristics and school characteristics can be considerably strengthened through leadership and accountability (Terrell & Lindsey, 2008; Shields, 2010; Patton, 2011; Turner, 2014). Brayboy & Castagno (2009) posit that a resolute leader who is receptive and responsive to the needs of culturally and linguistically diverse students is needed. Several leadership approaches align and allow for culturally responsive pedagogy. Distributed Leadership, Organizational Leadership, Transformative Leadership, Strengths Based Leadership, and Positive Organizational Scholarship each consist of elements that empower faculty to integrate the cultural diversity of their students into their curriculum and classroom practices (Spillane, 2012; Scott & Davis, 2015; Shields, 2008; Rath & Conchie, 2008; Buckingham, 2005; Daly, Chrispeels, & Einstein, 2005). Each of these leadership approaches fosters a supportive space where teachers who desire to become culturally responsive practitioners can do so with relative ease.

Perhaps, the leadership approaches most directly related to culturally responsive pedagogy are Culturally Proficient Leadership, Applied Critical Leadership, and Culturally Responsive School Leadership. Culturally Proficient Leadership utilizes four tools to transition organizations from cultural destruction to cultural proficiency by encouraging the use of identity discovery of self and others (Terrell & Lindsey, 2008). Through examination of the barriers, understanding of the guiding principles, recognition of placement on the cultural proficiency continuum, and incorporation of the essential elements, individuals can move toward viewing the world through a culturally proficient lens. Applied Critical Leadership emphasizes leadership development that incorporates social justice, educational equity, professional practice and leaders' lived experiences to expose, reduce, and remove inequitable relationships and policies that often persist in various educational contexts

(Santamaria & Santamaria, 2015). Some characteristics of this leadership style include a desire to learn about the social, cultural, political, and linguistic contexts of the community, humility that leads to acknowledgement of community expertise and a willingness to engage in collaborative decision making with the community. Applied Critical Leadership entails a commitment to local, national, and global citizenship that compels leaders to actively seek experiences and professional development opportunities that contribute to their growth as social justice education advocates who are responsive to the communities they serve (Santamaria & Santamaria, 2015).

Similarly, culturally responsive school leadership focuses on a leader's ability to engage in critical self-awareness, invest time in culturally responsive teacher preparation that precludes implementation apathy (Mette, Nieuwenhuizen, & Hvidston, 2016), establish and maintain culturally responsive school environments, and to actively participate in community advocacy (Khalifa, Gooden, & Davis, 2016). School leaders are encouraged to consider a commitment to embodying culturally responsive practices (Khalifa, 2013, Brayboy & Castagno, 2009) because research indicates that leaders who engage in community building and parent engagement, hold high expectations for all students, and support teachers and students equitably, facilitate greater student academic progress at their school sites (Okoye-Johnson, 2007; Merchant, Garza, & Ramalho, 2013). The scholarship indicates that leaders who place an emphasis on equity, inclusion, social justice, and advocacy can achieve more efficacy when they are aware of and responsive to the culturally diverse students they are attempting to serve.

CHAPTER III: METHODOLOGY

This research study was informed by Kamau Siwatu, the researcher who initially developed the Culturally Responsive Teaching Self-Efficacy Survey (CRTSE) and Culturally Responsive Classroom Management Self-Efficacy Survey (CRCMSE) scales, (Siwatu, 2007; Siwatu 2011, Siwatu et al.; 2015). A mixed methods approach was utilized to inform the research questions and sub-questions. Greene (2007) asserts that a “mixed methods way of thinking rests on assumptions that there are multiple legitimate approaches to social inquiry” thus, the use of quantitative or qualitative methods in isolation can result in partial understanding of the studied phenomena (Greene, 2007, p.20). This study sought to achieve a more complete understanding of CRTSE and CRCMSE beliefs for the purpose of designing meaningful improvement pathways that increase the collective culturally responsive efficacy of teachers.

Research Questions

The study intended to explain teacher perceptions of their culturally responsive teaching and classroom management efficacy. In addition, the study sought to examine specific improvement pathways to evaluate their ability to increase perceptions of culturally responsive teaching and classroom management teacher efficacy and promote use of culturally responsive practices. The research questions addressed were as follows: 1) How do educators’ backgrounds impact their culturally responsive teaching and classroom management self-efficacy? 2) To what extent do teachers’ backgrounds and beliefs impact their stated teaching behavior? and 3) In what ways does each culturally responsive improvement pathway impact culturally responsive pedagogy awareness, application, and

culturally responsive teaching and classroom management self-efficacy assessment?

Research Site

The research site is a public charter high school that is part of charter management organization founded in 2000 and consists of five high schools, four middle schools, four elementary schools, and one graduate school of education. The organization is committed to equity and organization wide improvement as evidenced by their Center for Research on Equity and Innovation which uses improvement science to strategically address problems of practice in K12 education. The research site is a Title I school that serves approximately 400 students ranging from 9th-12th grade. Forty-eight percent of students are female, 72% are students of color, 10.5% receive special education services, 4% are emergent bilinguals, and approximately 47% of students receive free and reduced lunch (California Department of Education, 2018; personal communication). A new school director was hired for the 2017/2018 school year. The total number of the current staff, including the director, is thirty-five. At the time of the study, there were twenty-five teachers and the remaining staff consisted of administration, inclusion, and information technology personnel.

Research Design

The approach for the research study is a mixed methods research design. Mixed methods research has gained traction as a methodological option for researchers in a wide array of professions over the past several years (Cameron, 2011; Ponterotto et al., 2013). Since quantitative and qualitative studies provide different types of data, closed and open respectively, a mixed methods approach uses a combination of quantitative and qualitative data which can lead to deeper comprehension of the problem (Creswell, 2014). There are six major mixed methods research designs: convergent, explanatory, exploratory, embedded,

transformative, and multiphase (Creswell & Clark, 2007). This study used a multiphase design whereby the researcher utilized both sequential and concurrent approaches throughout the course of the study. In sum, qualitative and quantitative data will work collaboratively to inform the research questions.

The mixed methods study used three phases of data collection. The purpose of the first phase was to collect data from high school teachers and education specialists who work at a public charter school in San Diego County. In order to the first research question, the study participants were asked to complete two surveys related to culturally responsive teaching and classroom management efficacy, and one questionnaire that collected demographic information and determined their interest in participating in a case study. The surveys and questionnaire were completed in one sitting to ensure full participation. During the second phase of the study, the participants who indicated a willingness to take part in a case study engaged in a semi-structured interview designed to address the second research question, listened to an overview of the three culturally responsive teaching and classroom management improvement pathways, then selected the pathway that felt most appropriate. The improvement pathways consisted of the following: Pathway #1- a guided book study with ideation sessions and audio recorded coaching conversations, Pathway #2- filmed teaching observations, culturally responsive teaching self-assessments, and audio recorded coaching conversations, and Pathway #3- design and facilitation of faculty professional development that centers on culturally responsive pedagogy and audio recorded debrief of professional development evaluations. In the third phase of the study, the case study participants engaged in their respective improvement pathways under the supervision of the researcher, completed an audio recorded final reflection, and along with initial survey participants, took the CRTSE

and CRCMSE surveys a second time, all of which helped to answer the third and final research question. The post survey took place after case study participants had ample time to implement some of the self-knowledge, content knowledge, and experiential knowledge utilized in the various improvement pathways. At the end of the study the researcher conducted an in-depth analysis of quantitative and qualitative data.

Participants

Teachers and Education Specialists. Teachers selected for participation in this study included all classroom teachers and education specialists. Teachers included any classroom teacher or education specialists who provide direct instruction and/or work directly with students on a regular basis. Teachers who expressed a voluntary willingness to participate in the case study were selected for interviews, then each participant had an opportunity to select one improvement pathway. The selection process did not discriminate against participant age, sex, ethnic background and/or health status.

Instrumentation and Data Collection Procedures

Surveys. The CRTSE instrument (see Appendix A) and the CRCMSE instrument (see Appendix B) was employed to measure pre-service teachers' culturally responsive teaching and classroom management self-efficacy (Siwatu, 2007; 2011; 2015). The CRTSE, developed in 2007 (Siwatu, 2007) and later adapted in 2015 (Siwatu, 2015), consists of 41 items in a Likert-like scale format. Based on analysis of other respected researchers, Siwatu (2007) opted for a 0-100 sliding scale which was found to be psychometrically stronger than a standard Likert scale. The survey asks teachers to rate how confident they are in their ability to successfully accomplish each of the culturally responsive tasks listed. Participants may answer with any number from 0-100. Here are examples of confidence levels: a score of 0

indicates no confidence, a score of 50 indicates moderate confidence, and a score of 100 indicates complete confidence. Similarly, the CRCMSE developed in 2015, also uses a 0-100 sliding scale with the same confidence descriptors, however it consists of 35 items. Siwatu (2007) and Siwatu et al. (2015) verified the validity through pilot studies and included support for the reliability and validity these instruments.

The participant responses for the 41 item CRTSE survey were summed to generate a total score that ranged from 0-4100. This total score was then divided by the number of survey items to yield a CRTSE strength index. Similarly, the participant responses for the 35 item CRCMSE survey items were summed to generate a total score that ranged from 0-3500, then divided by the number of survey items to generate a CRCMSE strength index. Both strength indexes, which can range from 0 (low self-efficacy beliefs) to 100 (high self-efficacy beliefs), serve as quantitative indicators of the strength of each educator's CRTSE and CRCMSE self-efficacy beliefs. A high strength index (CRTSE 71 or above, CRCMSE 69 or above) indicates that the participant was more confident in their ability compared to participants with a lower strength index (CRTSE 70 or below, CRCMSE 68 or below).

Interviews. Semi-structured interviews (see Appendix C) provide the most appropriate explanatory power. This research tool allows the researcher to delve deep into the backgrounds, beliefs, and motivations for specific participant behavior. The study intended to understand what dispositions and conditions promote the use of culturally responsive pedagogy, as well as what dispositions and conditions prohibit the use of culturally responsive pedagogy. The semi-structured interview process elicited more detail from participants and helped further explain thought processes of each case study participant. Each initial interview was face-to-face, and with the permission of participants, the interview was audio recorded.

Participants were able to use this opportunity to honestly express their feelings, opinions, frustrations, and questions in an open-ended format.

The researcher contacted the participants who indicated a willingness to participate in the study in order to confirm their participation and provided them with a consent form that contains a detailed explanation of how each particular phase of the study would be administered. Teachers who agreed to participate, communicated in person or via email to indicate their availability for the initial interview. Interviews were scheduled based on participant availability and took place in a private setting. All interviews used a semi-structured format of guided questions informed by the literature on culturally responsive pedagogy, and included opportunities for participants to expand, backtrack, or clarify when necessary. The audio recorded interviews were professionally transcribed by Rev.com. The researcher read the transcription while listening to the audio in order to ensure accuracy. At the conclusion of each improvement pathway's implementation window, participants completed a final reflective interview.

Tailored Teacher Observation Tool. Zaretta Hammond, author of *Culturally Responsive Teaching and the Brain*, has built on the work of Ladson-Billings and Geneva Gay by utilizing a framework which is designed to provide teachers with practical strategies and tools for the implementation of Culturally Responsive Pedagogy. The Dimensions of Equity framework, is Hammond's framework for distinguishing the tenets and outcomes of multicultural education, social justice education, and culturally responsive pedagogy.

DIMENSIONS OF EQUITY As equity-focused educators, it is important to distinguish between three key areas in education: <i>multicultural education</i>, <i>social justice education</i>, and <i>culturally responsive teaching</i>. Too often the terms are used interchangeably when they are not. Below is a simple chart to help you understand the distinctions between them. A key point to remember, only CRT is focused on the cognitive development of under-served students. Multicultural and social justice education have more of a supporting role in culturally responsive teaching.		
MULTICULTURAL EDUCATION	SOCIAL JUSTICE EDUCATION	CULTURALLY RESPONSIVE PEDAGOGY
Focuses on celebrating diversity	Focuses on exposing the social political context that students experience	Focuses on improving the learning capacity of diverse students who have been marginalized educationally
Centers around creating positive social interactions across difference	Centers around raising students' consciousness about inequity in everyday social, environmental, economic, and political aspects of life	Centers around the affective & cognitive aspects of teaching and learning
Concerns itself with exposing privileged students to diverse literature, multiple perspectives, and inclusion in the curriculum as well as help students of color see themselves reflected.	Concerns itself with creating lenses to recognize and interrupt inequitable patterns and practices in society.	Concerns itself with building resilience and academic mindset by pushing back on dominant narratives about people of color.
Social Harmony	Critical Consciousness	Independent Learning

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Figure 2. Dimensions of Equity Framework

For participants who opted for the classroom observation, self-assessment and debrief pathway, a Dimensions of Equity Self-Assessment (see Appendix D) based on Zaretta Hammond's Dimensions of Equity framework and designed by the researcher was used to facilitate both the observation, self-assessment, and debrief process in order to monitor culturally responsive classroom practices. Teacher observations were pre-arranged with the teachers and conducted in the classrooms of the case study participant. The researcher also took notes on teacher and student interactions to help enrich the content of coaching conversations. A minimum of two observations per teacher was conducted throughout the duration of the study.

Zaretta Hammond’s *Culturally Responsive Teaching and the Brain*. Participants who opted into the book study with coaching conversations pathway engaged in a nine part study of the book, *Culturally Responsive Teaching and the Brain*, as well as a change-idea design and implementation experience that was guided by a 3M Reflective-Action Protocol. The 3M Reflective-Action Protocol designed by the researcher was divided into three sections: Mindsets, Moves, and Musings (see Appendix E). At each chapter check-in participants discussed how the content confirmed, challenged, or shifted their “mindset”, or previously held beliefs about teaching culturally and linguistically diverse students, selected a teaching “move” they learned from the chapter or during the coaching conversation, and once the teaching “move” was completed, participants shared “musings”, or a reflection on the outcome of what they did. The nature of the book study allowed for the exercise of multiple ideas and iterations to improve culturally responsive practices in their own classrooms.

Professional Development. Participants who opted into the professional development design and delivery pathway created and facilitated two professional development workshops for faculty that centered on culturally responsive pedagogy.

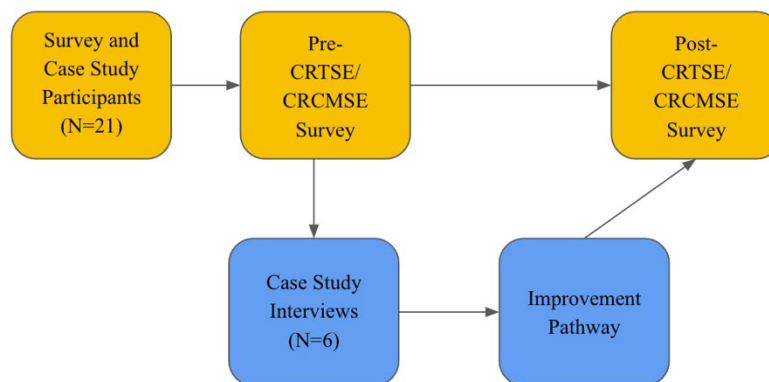


Figure 3. A Representation of the Study Process

Data Analysis

In this multiphase mixed methods study data analysis occurred throughout various points of the study. Data analysis included an examination of the following: self-efficacy surveys, background questionnaires, interviews, improvement pathway documentation, and teacher observations. A quantitative computer program, Statistical Package for Social Sciences (SPSS) was used to assist with the analysis of the pre and post survey and a qualitative computer program, Dedoose in addition to hand coding, was used to help with the analysis of coding for patterns and themes that emerged from the qualitative components of the study. This collection of data underwent individual analysis followed by integrated analysis in order to triangulate research findings. Triangulation, or the process of examining evidence from multiple data sources and utilizing it to substantiate surfaced themes, added validity to the research study because it included a cross-pollination of participant perspectives and researcher observations (Creswell, 2014). The subsequent section will discuss how each data source was analyzed.

Quantitative Data Analysis. To understand the impact of culturally responsive teaching and classroom management self-efficacy improvement pathways, the researcher analyzed the pre and post self-efficacy surveys. The researcher ran a comparison of means from the pre and post data for all participants, and sub-group data comparisons were made for the participants who participate in the case study. By performing paired samples T-Test to compare changes in efficacy perceptions around culturally responsive teaching and classroom management self-efficacy, the researcher was able to identify increases and decreases in self-efficacy perception for each of the survey items. For case study participants in particular, the

paired samples T-Test helped the researcher identify the participant changes in efficacy for each distinct improvement pathways for purposes of comparison.

Qualitative Data Analysis. Qualitative analysis included an in-depth examination of the background questionnaire, interview transcripts, journal entries, fieldnotes from teacher observations, debriefs, book study sessions, and professional development design sessions. To better understand the ways in which backgrounds and beliefs impact behavioral interactions between teachers and culturally and linguistically diverse students, the researcher analyzed the background questionnaire to identify patterns and themes that emerge from the research participants. This questionnaire was also be used to gain insight prior to the semi-structured interview for the voluntary case study participants. The background questionnaire and interview transcriptions were entered into a qualitative computer data analysis program to undergo coding. The case study interviews were conducted utilizing structural coding which is a question-based coding that both “codes and initially categorizes the data to examine comparable segments’ commonalities, differences, and relationships (Saldana, 2016). The structural coding was based on specific sections in the semi-structured interview questions that centered on participants’ background, beliefs, and self-reported pedagogical behavior. In vivo coding was conducted for the first cycle of transcript review using an online data analysis tool called Dedoose which assisted in the extraction transcript excerpts related to the research question. A post-coding transition, coding of codes, was conducted to help condense the corpus for more feasible data analysis. Values coding was conducted for the second cycle of coding to identify values, attitudes, and beliefs across case study participants, followed by pattern coding, the final cycle used in this study to help with categorization and theme development.

The researcher analyzed improvement pathway specific data (i.e. 3M Reflective-Action Protocol, Dimensions of Equity Self-Assessment, coaching conversation recordings) to evaluate instances of awareness and instances of application. Instances of awareness included occasions when knowledge, perception, recollection, discovery, or insight of a situation was present, while instances of application included occasions when participants put a practice into operation. The purpose of this thorough analysis of codes was to gain a better understanding of the intersectionality of background, belief, and stated teaching behavior, as well as determine how teachers experienced culturally responsive teaching and classroom management improvement pathways.

After synthesizing the findings, the researcher interpreted the meaning of categories and themes, and attempted to validate the accuracy of information by engaging in triangulation, member checking, and peer debriefing.

Table 1. Summary of Data Instruments and Analysis

Instrument	Data Collected	Analysis	Informs
Culturally Responsive Teaching and Classroom Management pre- and post- surveys	A Likert-like sliding scale survey related to: - Confidence in the ability to accomplish culturally responsive teaching tasks - Confidence in the ability to accomplish culturally responsive classroom management tasks	Paired sample t-test	Whether or not shifts occurred in teachers: - Culturally Responsive Teaching Efficacy - Culturally Responsive Classroom Management
Semi-structured interviews of case study participants (~50 minutes each)	Qualitative interview data: - Teaching philosophy - Background experiences from adolescence to adulthood - Beliefs about the world - Beliefs about self - Values connected to stated teaching behavior - Teacher characteristics that promote or prohibit engagement with culturally responsive pedagogy	Structural Coding In Vivo Coding Coding of Codes Values Coding Pattern Coding	Understanding of the teachers lived experience during the improvement pathway including: - Evolving teacher understanding of connections between background, beliefs and behavior - How teachers perceive value of culturally responsive pedagogy - Effects on teacher efficacy - Effects on teacher agency - Supports and barriers to learning about and implementing culturally responsive pedagogy
Improvement pathway documentation	3M Reflective-Action Protocol - Dimensions of Equity Self-Assessment - Professional development agendas - Professional development slides - Exit cards - Audio recordings of coaching conversations and debriefs	Structural coding In Vivo Coding Thematic Coding	Engagement with culturally responsive pedagogy improvement pathways: - Awareness of culturally responsive teaching and classroom management practices - Application of culturally responsive teaching and classroom management practices - Receptivity to culturally responsive improvement pathways Improvement pathways' impact on culturally responsive teaching and classroom management self-efficacy

Summary

This research study utilized quantitative and qualitative methods to investigate the intersectionality of teachers' backgrounds, beliefs, stated teaching behavior. In addition, the study explored culturally responsive teaching and classroom management improvement pathways to understand the extent to which they led to increases in teacher efficacy. The mixed-methods study used pre- and post-surveys to identify and document any changes in their perceptions regarding their culturally responsive teaching and classroom management

efficacy. Interview data was coded to uncover themes around how teachers' life histories, experiences, and worldviews influenced their comfortability and effectiveness when working with diverse student populations. Teacher observation, improvement pathway documentation, and coaching conversation recordings was collected to triangulate potential themes found in the interview and survey data. All data was analyzed to identify to what extent each improvement pathway resulted in a shift of teaching and classroom management practices and an increase in perceived teacher efficacy. Collectively, this study allowed the researcher to rigorously explore the research questions in an effort to understand key components that result in a more culturally responsive educational experience for all students.

CHAPTER IV: FINDINGS

This chapter presents the findings of a multiphase, mixed methods study that explored the following research questions: 1) How do educators' backgrounds impact their culturally responsive teaching and classroom management self-efficacy? 2) To what extent do teachers' backgrounds and beliefs impact their stated teaching behavior? and 3) In what ways does each culturally responsive improvement pathway impact culturally responsive pedagogy awareness, application, and culturally responsive teaching and classroom management self-efficacy assessment? The chapter begins by providing details of survey participants and case study participants, then shares findings from the three phases of the study. Phase I presents the results of the Background Questionnaire, CRTSE, and CRCMSE pre-surveys introduced in Chapter 3 then describes the case study selection process. Phase II provides a thematic analysis of case study interviews to explore the intersectionality of background, beliefs, and teaching behavior for each case study participant. Lastly, Phase III presents findings of the CRTSE and CRCMSE post surveys as well as qualitative analysis of case study participants' coaching conversations, classroom observations, improvement pathway documents, and reflections.

Participants

Survey Participants. A total of twenty-two educators voluntarily completed the Culturally Responsive Teaching Self-Efficacy Survey, Culturally Responsive Classroom Management Survey, and Demographic Questionnaire. Eleven of the participants were female, ten were male, and one identified as non-binary/third gender. The self-identified race/ethnicity of the participants included thirteen Caucasians, five Asian/Pacific Islander, two biracial, one Latino, and one who preferred not to answer. Eighteen of the participants

identified as heterosexual, two as homosexual, one preferred to self describe, and one preferred not to answer. One participant selected the 18-24 age range, twelve participants selected the 25-34 age range, eight participants selected the 35-44 age range, and one participant selected the 45-54 age range. In regard to education level, seventeen participants have master's degrees, three have bachelor's degrees, one has a professional degree, and one has a doctorate. The teaching experience of participants includes two first year teachers, two with 1-2 years experience, six with 3-5 years experience, seven with 6-10 years experience, three with 11-15 years experience, one with 16-20 years experience, and one who preferred not to answer. Lastly, the subject areas of participants include four Math teachers, four Humanities teachers, four Science teachers, one Computer Programming teacher, one Multimedia teacher, three Education Specialists, and one who preferred not to answer. Table 2 provides an overview of survey participants.

Table 2. Survey Participants' Background Information Frequency

Background Demographics		<i>f</i>	%
Gender	Male	10	45
	Female	11	50
	Nonbinary/3rdGender	1	5
Race	White	13	59
	Person of Color	8	36
	Prefer not to answer	1	5
Sexuality	Heterosexual	18	81.8
	Homosexual	2	9.1
	Prefer to self describe	1	4.5
	Prefer not to answer	1	4.5
Age	18-24	1	4.5
	25-34	12	54.5
	35-44	7	31.82
	45-54	1	4.5
	Prefer not to answer	1	4.5
Education Level	Bachelors	17	77.3
	Masters	3	13.6
	Doctorate	1	4.5
	Professional Degree	1	4.5
Teaching Experience	First Year	2	9
	1-2	2	9
	3-5	6	27.3
	6-10	7	31.8
	11-15	3	13.6
	16-20	1	4.5
	Prefer not to answer	1	4.5
Subject Area	Humanities	4	18.2
	Math	4	18.2
	Science	4	18.2
	Multimedia	1	4.5
	Computer Programming	1	4.5
	Education Specialist	3	13.6
	Prefer not to answer	1	4.5

Phase I:

Background Questionnaire, Pre-Survey Data Analysis, and Case Study Selection

Upon completion of the background questionnaire and two surveys, a Culturally Responsive Teaching Self-Efficacy Strength Index and a Culturally Responsive Classroom Management Strength Index was calculated for each participant based on their responses to the survey items which evaluated self-efficacy around specific teaching practices and self-efficacy around specific classroom management practices, respectively. The researcher only included responses that had adequate variation in scores, resulting in the removal of one respondent, for a remaining sample size of twenty-one participants. The strength indexes for the entire sample was used to conduct mean comparisons for each of the background questions. The strength index ranged from 0 (low self-efficacy beliefs) to 100 (high self-efficacy beliefs). The strength indexes from the research sample were then used to answer research question 1) How do educators' backgrounds impact their culturally responsive teaching and classroom management self-efficacy?

Survey Participants

Participants were asked twenty-six background questions and self-reported the following: gender, age, race, sexuality, number of languages spoken, physical ability, mental ability, religious affiliation, political orientation, education level, teaching experience, teaching grade level, subject area, number of years teaching the subject, number of years at teaching site, neighborhood growing up, household income growing up, parental family status growing up, number of languages spoken growing up, religious affiliation growing up, political orientation growing up, mother's education level, father's education level, international travel growing up, exposure to culturally responsive teaching, and interest in the

case study. Mean comparisons were conducted by using independent samples t-tests to find the mean differences in CRTSE/CRCMSE Strength Indexes and two variables out of twenty-six, household income growing up and family status growing up, were found to be statistically significant. There was a significant difference found for household income growing up for both the CRTSE and CRCMSE strength index, with participants who had household incomes less than \$50,000 reporting mean scores of 78 and 83, respectively, and participants who had household incomes greater than or equal to \$50,000 reporting mean scores of 66 and 65, ($p < .042$, $p < .011$). There was a significant difference found for family status growing up for the CRCMSE strength index, with participants from single, separated, divorced, or other partnership arrangements reporting a mean score of 88 and participants from married households reporting a mean score of 66 ($p < .010$). Table 3 lists background variables and the corresponding strength indexes for the two variables that were found to be statistically significant.

Table 3. Statistically Significant CRTSE and CRCMSE Indexes

Variables	CRTSE Index	CRCMSE Index
Household Income Growing Up		
< 50 K	78	83
$\geq 50K$	66	65
Family Status Growing Up		
Married	67	66
Divorced/Separated/Other	80	88

Case Study Participants

Of the twenty-two surveyed educators, fifteen indicated an interest in participating in the case study and six educators were selected based on the completeness of their survey and an attempt to secure racial, gender, and subject area diversity. Three males and three females

participated in the study. Three participants identified as Caucasian, one participant identified as Asian/Pacific Islander, one participant identified as Latino, one participant identified as biracial. Five of the participants identified as heterosexual and one participant identified as homosexual. One participant selected the 18-24 age range, four participants selected the 25-34 age range, and one participant selected the 35-44 age range. Two participants have bachelor's degrees, three participants have master's degrees, and one participant has a doctorate. The teaching experience of the participants includes one first year teacher, three teachers who have been teaching 3-5 years, and two teachers who have been teaching 6-10 years. The subject areas of participants include three Math teachers, two Science teachers, and one Humanities teacher.

Phase II: Case Study Interview Analysis via Vignettes

In order to answer research question 2) To what extent do teachers backgrounds and beliefs impact their stated teaching behavior?, six case study participants were interviewed to explore the ways in which background and beliefs are manifested in stated teaching behavior. A descriptive vignette of each case study participant is included to convey the interplay between background, beliefs, and stated teaching behavior, followed by a thematic analysis to identify patterns in continuity. Table 4 displays assigned pseudonyms to maintain the anonymity of the case study participants, while providing the ability to discuss each participant by a personal name in subsequent data analysis. It also includes their CRTSE and CRCMSE Pre Survey Strength Indexes.

Table 4. Case Study Participants Pseudonyms and CRTSE/CRCMSE Pre-Survey Indexes

Participant	Pseudonym	Gender	Ethnicity	CRTSE Pre-Survey Strength Index	CRCMSE Pre-Survey Strength Index
1	Claire	F	White	60	63
2	Javier	M	Latino	67	76
3	Melanie	F	Asian	71	66
4	Charlie	M	White	79	77
5	Sarah	F	Asian	61	58
6	Brad	M	White	70	73

Book Study Participants

After the initial interview, each case study participant read all nine chapters of Zaretta Hammond's, *Culturally Responsive Teaching and the Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students*, completed a 3M Reflective-Action Protocol which guided participants through mindsets, moves, and musings. Following each chapter, participants met with the researcher for a coaching conversation where participants discussed content that confirmed, challenged, or shifted their mindset, committed to a trying a particular culturally responsive move, and shared their musings on how the previous change idea went. Pseudonyms for Book Study participants are Claire, Javier, and Melanie.

Claire's Background. Claire, who identifies as Caucasian, was born to a two-parent household on a dairy farm in a rural part of Australia. She and her four sisters had the benefit of having two parents who were educators which meant that she learned mathematics from her mother even before she began her formal education. In addition to education being a primary focus in her household, she remembers her mother instilling the importance of being

a good person, being kind to people, and “looking after people who didn’t have things”. She admittedly grew up sheltered in that her family did not travel, and her entire world consisted of interacting with people who looked and sounded just like she did. When Claire was permitted to attend the private high school where her father taught Mathematics, she began to realize the differences in socioeconomic status as she was suddenly surrounded by people who had more material possessions than she did. Despite attending university with a high population of Asians and marrying an Asian man, Claire admits that her awareness of race, ethnicity, and social injustice did not begin until she was well into her 30’s, living in the United States and teaching high school for the very first time. She stated, “I didn’t really get it...I didn’t get it until I came to the United States.” Claire remembers feeling guilt about her lack of awareness and wondered aloud, “what kind of lack of empathy or consideration had I showed in the past by not even recognizing this thing that was everywhere?”

Claire’s Beliefs. Claire grew up believing in the power of education and in the pivotal role an individual can play in improving the lives of others as well as the world. The value of caring about other people continued into her adulthood. Initially, she viewed teaching as a way to help students “learn new things that would make them smarter”, but now believes that it is important to help students understand “what it means to be a good human being” and teach them how to be “good learners and good citizens”. Claire is a proponent of growth mindset and is convinced that if people do not believe in their own ability to do something they can get in the way of their own success. This philosophy is embodied in her own practice as she perpetually seeks out opportunities for professional development that centers on math, equity, and inclusion. With her own students, Claire attempts to convey that the development of confidence, self-efficacy, work ethic, and effort will prevail.

Claire's Teaching Behavior. Claire tries to exude and instill a joy of learning, growth mindset, and a supportive presence for all of her students stating, "I just want them to know that I believe that they can do anything they want to." She engages in exercises that allow students to practice math, ask questions, and make sense of their learning because she wants all students to "recognize that there's no such thing as a maths person", assuring them that anyone can be successful in mathematics. Despite her optimism about student ability, Claire is cognizant of the need and her own desire to meet the needs of culturally and linguistically diverse students who often struggle in her class. In a moment of complete vulnerability, she confessed, "I worry sometimes that I'm teaching kids how to be White instead of teaching them just how to be great as they are." Her initial mindset reflected an acknowledgement and tension in the cultural mismatch she felt as a White educator teaching culturally and linguistically diverse students "from a completely different background". She has a sense that her White students can relate to her more easily, and at the same time recognizes the predictable outcomes for students of color perpetuated in her math class. Although Claire believes she has not done a great deal to address and respond to cultural identity in the classroom, she is genuinely interested in exploring ways to cultivate a more culturally responsive mathematics classroom. When Claire took the pre-intervention survey, she scored a CRTSE Index of 60 and CRCMSE Index of 63.

Javier's Background. Javier, who identifies as Latino, grew up in a suburban neighborhood in Southern California. He initially described his family as bicultural because he recalls going to visit relatives in Mexico often, but quickly admitted that his household was "more American than Mexican". Both of his parents attended university and his father went on to earn his master's degree. His parents firmly emphasized the importance of education,

and he always knew he would attend college. Throughout his entire upbringing, they also instilled the importance of being kind to people and having a strong work ethic. Javier attended a predominantly White, private high school, and although he was “never the smartest kid in class”, he worked hard in order to get good grades and succeed. His primary and secondary school experiences did not present many opportunities for cultural diversity so it was not until college, when he was heavily involved in sports, that he was exposed to heightened levels of cultural diversity, took courses in African American and Chicano studies, and experienced his first notable instances of racism.

Javier’s Beliefs. Javier’s reverence for education continued into his adulthood and career path, asserting that “a degree may not lead to a job, [but] education can help you grow as a human being.” The two core values he brings to teaching are his work ethic and his deep care for others as evidenced in this statement, “You’ve got to work hard, you have to care about people, you can’t just care about yourself”. He believes in the power of relationships and team building as a foundation for education and trusts that, “if the students have buy-in into what they're doing they will definitely go down whatever path you take them” and they get the buy-in by bonding with the teacher, “then using the material, essentially, to help make the bond stronger in a way.” Javier admits that it can be challenging to build relationships, but if you get to know your students on a personal level, they will reach a degree of voluntary engagement that leads to academic success.

Javier’s Teaching Behavior. In his Humanities class, Javier greets each student when they enter the classroom and makes regular attempts to get to know them on a personal level. He asks about their family life and their interests outside of academics believing that, “if you could just be nice and try to help them and say hello to them and just be a generally nice

person then eventually they'll feel comfortable with you.” His dedication to relationship building is apparent in that if a student only gives a one-word answer he is persistent, trusting that eventually they will open up and become more comfortable: “I'm going to get to know you, I'm going to know what your strengths and what your weaknesses are and then I'm going to tailor my teaching to that. It's about you, not about anything else.”

Javier embraces a more student centered approach by soliciting opinions from his students to truly incorporate their perspectives. He wants students to enjoy learning and have an authentic relationship with him, yet wrestles with finding the balance between cultivating a joyful atmosphere and challenging students academically. Although Javier prides himself in treating his students equally, he admits that, “If you have high performing standards then your bar is going to be a little bit higher. If I know that you need a little bit more assistance, then I might have your bar be a little bit lower so that you don't feel overwhelmed by me setting it way too high.” He is trying to integrate more cultural diversity and dispositions into his classroom curriculum but feels like he could be doing it much more. When Javier took the pre-intervention survey, he scored a CRTSE Index of 67 and CRCMSE Index of 76.

Melanie's Background. Melanie, who identifies as biracial, is Japanese and White and grew up in Hawaii in a fairly traditional Japanese household. She was the first born and feels that it came with many firstborn obligations that are often stereotyped in popular culture. There was quite a bit of significance placed on education as both of her parents completed university, and her mother went on to earn her master's degree. It was an unspoken rule that she was expected to do the same. She grew up with a strong sense of independence and felt as long as she “didn't mess up” and earned all A's no one would bother her, and she could just do her “thing”. Melanie remembers both of her parents working hard and learned not to take

that work ethic for granted. She saw their commitment and dedication pay off and wanted to emulate it. Reflecting on elementary school she remembers learning about native Hawaiian culture and the influx of missionaries and plantation workers that ultimately shaped the Hawaii's history and demographics and "recognized early-on some of the disparities between certain cultures, even within a place like Hawaii that is very mixed." The curriculum she was exposed to taught her about "differences between people and what they can carry with them just based on their own people's history, or their own ancestors' history of how they got there and who treated them certain ways in the past." Melanie's early exposure to diversity led to a bit of culture shock when she entered university in Southern California and was suddenly surrounded by a majority of white males in the STEM field.

Melanie's Beliefs. Melanie's teaching philosophy is centered on the belief that math is essential to understanding the way the world works and how certain elements connect and interact. Confident in the power of exploration, she begins each year asking students, "How can we see the world around us through a mathematical lens?", and then designs learning experiences that allow students to do just that. For Melanie, it's "less about finding the answer and more about the way to get there", which is why she places more focus on the process than the results. She believes that teaching is a two-way conversation that blossoms with time and effort which is why she values any opportunity to collaborate and problem solve with her students. Melanie prides herself on being a reflective practitioner yet admits that is still challenging for her to connect and get to know students personally in a math class.

Melanie's Teaching Behavior. In her Math class, Melanie is committed to trying a number of approaches to engage her students in mathematics. She starts every class with "Math Talks", a time focused on getting students "to have fun with math and just do puzzles".

She has students find articles related to mathematics to bring in for discussion and does her best to circle everyday conversations back to mathematics to truly demonstrate math's connectivity to the world. Melanie champions the notion of students as experts and provides them with opportunities to find creative ways to problem solve individually, in groups, as well as with her own guidance. Though she enjoys working one-on-one with students and attempting to get to know them on a personal level and helping them build mathematical connections, Melanie admits that when it comes to integrating cultural diversity and dispositions in the classroom, she tends to hide behind math, often envious of the culture and identity discussions that take place in Humanities classrooms. When Melanie took the pre-intervention survey, she scored a CRTSE Index of 71 and CRCMSE Index of 66.

Video Self-Assessment Participants

Following their initial interview, two participants opted into the Video Self-Assessment improvement pathway. The participants were filmed by the researcher for twenty minutes or more, watched the video of their teaching and then completed the Dimensions of Equity Self-Assessment adapted from Hammond's Dimensions of Equity Chart. The researcher met with participants to debrief their reflections and respond to any participant-initiated questions related to teaching and culturally responsive pedagogy. Pseudonyms for Video Self-Assessment participants are Charlie and Sarah.

Charlie's Background. Charlie grew up relatively poor in a small, Massachusetts town of 13,000 people. Neither of his parents attended college and he described his family as "complicated" and "alternative". His parents worked multiple jobs, could not afford to travel very much so his experience and exposure to life outside of Massachusetts was dramatically limited. Charlie did not grow up with a great deal of support, financial or otherwise, so he was

forced to rely on his own wit to navigate the world, sharing, “I had to forge my own path, figure things out on my own, know how to use my resources, know how to ask for help and when to ask for help, and not necessarily from my family.” Charlie said he is “not bitter” and credits his upbringing for why he is now able to get what he wants and not wait for someone else to get it for him. Despite one elementary school memory of eating latkes, learning about dreidel, and being envious of Hanukkah gifts that two of his classmates discussed, Charlie had a monocultural upbringing. His high school was 98.5% White and the university in Delaware where he attended college was also predominantly White. Charlie did not truly have notable experiences with diverse cultures until he was well into adulthood.

Charlie’s Beliefs. Charlie believes that learning should be fun and enjoyable and aspires to keep equity at the forefront of his teaching but understands that equity “is not really a fixed target” because “it looks different all the time.” In addition to valuing equity, he describes his teaching philosophy as one that centers on curiosity, zone of passions, and varying the momentum of teaching practices. Exposing students to the outside world is how he believes they can gain different perspectives and see the world through different lenses. Here is his take on experiential learning: “I think that’s how you make memories and build knowledge and interest and spark questions, is by doing stuff.” After spending a year working primarily with the special education population, Charlie thinks that teachers should not assume what students know, instead they should honor the whole student and understand that “everybody learns differently, and everybody has ideas to contribute.”

Charlie’s Teaching Behavior. In his Environmental Science class, Charlie prides himself on getting students outside of the classroom whenever possible, whether through field trips, service learning, or working in the school’s community garden because investing time

and energy in and with community is really important to him. He strives to let experiences and inquiry drive student learning, “so that students feel empowered to see or connect to the things that they're interested in, and that make sense to them, and that give them a connection or a sense of belonging in this subject...” It is important to him that all students reach the same level of background knowledge in order to collectively build on that knowledge throughout the year. Charlie embraces the practice of facilitating shared learning experiences for students as well as student directed learning. He feels the value he places on equity is evident in his content selection, arranged field trips for students, and general guidance to view environmental science through a global perspective. When Charlie took the pre-intervention survey, he scored a CRTSE Index of 79 and CRCMSE Index of 77.

Sarah’s Background. Sarah identifies as a biracial mix of Vietnamese and White however, because she was adopted, she is not completely certain of her ethnic background. She grew up in a suburban neighborhood in a wealthy upper middle-class community in New Jersey and was raised by a White father and a Chinese mother. Both of her parents valued education and attended college, so it was a given that she and her sister would do the same. Sarah was enamored with math right from the start and enjoyed STEM classes much more than reading and writing. Her parents were extremely supportive of their daughters and saved an extensive amount of money so that their children could attend the college of their choice. Sarah recalls how much freedom she and her sister were given to choose whatever major would make them happy. In addition to financial and emotional support, Sarah’s parents encouraged both of their daughters to travel and try new experiences which is what led her to leave New Jersey to attend university in California. Sarah thought “everyone's ideas were, you just go to college and you get a job, and that's it. That's the path that everyone takes” until

she came to California to become a teacher where she realized that there were “different perspectives on education” and different pathways.

The community she grew up in as well as the school she attended was predominantly white, so she describes her upbringing as “sheltered” when it comes to exposure to cultural diversity. This trend continued when she made the decision to attend a small liberal arts college which also lacked cultural diversity. Although she is a woman of color, she did not consciously view herself as such, as she did not see herself as different from any of the people she grew up, “I feel like I always grew up in such not demographically diverse communities, that I just assumed that I was a part of that community. I didn’t feel ethnically or racially different from anyone else.” Proud of her accomplishments, Sarah attributes her achievements to the support she received from her parents and her work ethic.

Sarah’s Beliefs. Sarah’s teaching philosophy centers on building relationships with students in an effort to get them to truly enjoy mathematics. Sarah believes that learning should be enjoyable and transformative sharing, “Even in my class, I realize that teaching is not just teaching content. It’s teaching them how to interact with others, and how to problem solve, and how to be a human being.” When asked about the racial/ethnic breakdown of her classroom, Sarah said that it is not something she really notices, adding “I can see where this would be super applicable to a humanities class, but I feel like for me, I don’t really differentiate based on ... The only thing that I really would have to think about is my caseload, and the strengths that how many kids are super strong, and how many need more support?” She believes she teaches in an inclusive way that includes everyone and creates lesson plans that makes content accessible to all students.

Sarah's Teaching Behavior. When it comes to Sarah's Math class, she asserts that relationship building and vulnerability are significant cornerstones to gain the respect of students while demonstrating care for them, which is why she tries to strike a "good balance" between being the students' friend and teacher. She thinks it is really important to get to know students in and outside of the classroom, uses humor and transparency to connect with students stating, "the more that I share with them and I'm more real with them and tell them more about my life, the more they trust me and the more they feel they can trust me with their lives." Exploration and problem solving is a mainstay in her classroom because she wants all of her students to exercise agency in their learning as opposed to simply waiting for the correct answer. Sarah certainly feels the pressure of preparing students for standardized tests, so despite working at a project-based learning school, she sees value in teaching an SAT/ACT unit so that students and parents are appeased. At the same time, she shared that it was not until she became a teacher that she first came across "parents who don't understand what the importance of college is" and kids who "don't understand the importance of staying in school." She says she also tries to ensure that every lesson plan she makes is "accessible from the lowest level to the highest level" by co-creating with students or implementing accommodations. When Sarah took the pre-intervention survey, she scored a CRTSE Index of 61 and CRCMSE Index of 58.

Professional Development Design and Delivery Pathway

Following their initial interview, one participant opted into the Professional Development Design and Delivery pathway. The participant and the researcher met to review Hammond's Dimensions of Equity Chart, and then discussed the details of the planned professional development including audience, time, duration, focus, and approach. The

participant and researcher debriefed after each professional development and reviewed the attendees' evaluations. The pseudonym for the professional development design and delivery participant is Brad.

Brad's Background. Brad grew up in a two-parent household, though the actual home he lived in changed frequently due to his father's Navy career. His mother graduated from high school and his father earned a master's degree. As many families in armed forces are accustomed to, Brad's family moved periodically, exposing him to US Department of Defense schools which were racially, ethnically, religiously, and socioeconomically diverse. Brad had a wide cross-section of families that he interacted with on a daily basis, in addition to the privilege of spending time overseas recalling that "when you're in a wide, diverse group of kids and families, you wind up obviously noting the cultural differences and the different way that people look." Brad feels this exposure to cultural diversity at an early age affected the way he sees the world and the way he sees people. He also credits his convictions around respect and equality when it comes to diversity, whether it be socioeconomic, racial, or religious, to growing up in a "military-style conservatism" amongst a plurality of demographics. Brad always knew that it was expected of him to attend a four-year university right out of high school, and when torn between an engineering or theater major, his parents reminded him that he can always do theater without a degree but would not be able to do engineering without a degree, so he took their advice and majored in engineering.

Brad's Beliefs. In regard to his teaching philosophy, Brad said that it's "rooted in the idea...that education is the main pipe line for people to be able to lift themselves up and to increase their place or whatever they find themselves in society." His hope is to get as many students as possible to become scientifically literate and truly understand the importance of

science and the ways in which science has positively impacted human civilization. He truly believes that science should be accessible for all students and wants to find ways for students who are typically underrepresented in science to find themselves within this field. He considers himself to be a very empathetic person, a good listener and very steady. Brad values equity and attributes this to his upbringing growing up in stratified yet culturally diverse surroundings. He respects that people have different perspectives in different beliefs, and believes by teaching students, he is making the world a better place.

Brad's Behavior. Two behavioral mindsets that guide Brad's teaching practice are that it should be inquiry based and equity driven. He creates exploratory projects and assignments so that students have an opportunity to design their own learning experiences stating, "I'm trying to push myself in creating what would be considered autonomous learning curriculum where students create their own projects and then execute on those projects through that, and through a scientific or engineering lens." He appreciates working at a school that does not track students because he "takes a really strong bent towards equity", thus he tries his best to think about diverse groupings, curriculum, and instructional practices. Last semester he focused a project around the social capital gap that exists for many of his students. His goal is to get "non-White males and non-Asian male students excited about science, and physics, and engineering." Brad admits that he still has more to learn, but his pursuit for equity in education extends beyond the classroom and into conversations with colleagues where he is comfortable being a vocal champion for interrupting inequitable practices. When Brad took the pre-intervention survey, he scored a CRTSE Index of 70 and CRCMSE Index of 73.

Critical Intersectionality of Background, Beliefs, and Behavior

After analysis of interviews, coaching conversations, observations, improvement pathway progress, and final reflections, three themes developed related to the intersectionality of background, beliefs, and teaching behavior self-efficacy: cultural disposition awareness, values-influenced teaching philosophy, and propensity for professional growth. Below is a brief summary of how each theme showed up in the case study participants.

Cultural Disposition Awareness: Foundation, Format, Frequency. For six out of six participants the foundation, format, and frequency of cultural identity exposure influenced the degree of recognition and integration of cultural diversity in the classroom. Cultural identity awareness foundations for Claire, Javier, Sarah, and Charlie occurred in their adult years and the primary format was through orchestrated interpersonal interactions. Claire's monocultural and "sheltered" upbringing in a nearly all White community contributed to her colorblind worldview that was not disrupted until well into adulthood when she became a teacher and began to work closely with culturally and linguistically diverse students. Statements in her initial interview expressed doubt about her ability to connect with her students of color as easily as her White students and her ability to help her students of color overcome societal consequences of institutional racism, and as a result she was not actively integrating cultural dispositions in the classroom prior to the start of this study. Sarah's monocultural childhood and education experiences helped her develop a colorblind worldview that extended to her individual identification as evidenced by this statement, "I just assumed that I was part of the community. I didn't feel ethnically or racially different from anyone else." Although she engaged in extensive international travel, it was not until she became a teacher that she experienced continuous interpersonal interactions with individuals whose backgrounds were dramatically different from her own. The colorblind mentality

exhibited in her upbringing is also reflected in her pedagogy. In her initial interview she said students' cultural background is not something she notices, and that differentiating instruction based on cultural identity is more applicable in a Humanities class. Upon analysis of her disaggregated student data, she began to openly acknowledge she may need to invest more time into exploring culturally responsive teaching practices.

Charlie's monocultural lower class community upbringing and subsequent homogeneous education experiences meant he did not have his first friend of color until he was in college. He remembers thinking, "Oh my gosh, I have a friend of color, this is really fucking cool". Yet, throughout his adulthood, the majority of his friends remained White, thus, similar to Claire and Sarah, the inception of his teaching career was when he began to have consistent cross-cultural interactions on a regular basis. Despite his lack of cultural awareness growing up, he says he is committed to exposing students to the outside world to gain perspective and to honoring the diverse backgrounds of his students, yet he struggles to integrate students' sociocultural contexts into his curriculum. Javier's bicultural household and monocultural community and education means he did not experience notable cultural awareness until he attended college. The format of his exposure occurred through his participation in college sports where he and his teammates experienced subtle discriminatory treatment when attending games in different states. A secondary format was through curriculum exposure in courses such as Chicano and African American studies that deepened his understanding and awareness of historical and present-day cultural issues. As this is his first-year teaching, he does not have substantive experience integrating cultural diversity into his curriculum, but he is open to learning how to do it better.

Cultural awareness foundations for Melanie and Brad occurred in early childhood and adolescence. Melanie's exposure occurred in two formats, interpersonal interactions with community and classmates and primary school curriculum. She had grown accustomed to cultural diversity, thus experienced culture shock when she moved to San Diego for college and her STEM field colleagues was not diverse. Despite her familiarity and appreciation for cultural identity, she views it as separate from mathematics, and as a result does not explicitly integrate student's cultural dispositions into the classroom. Due to his upbringing in a Navy household and attendance at extremely diverse Department of Defense schools, Brad was exposed to a variety of cultures at an early age through schooling and social events with Naval families. His mixed demographic experiences and awareness of his own position of privilege contributes to his comfortability interacting with students from an array of cultural backgrounds. Although, he is confident in his mission to elevate students of color and female students who are often underrepresented in STEM fields and designing social justice focused learning experiences, he continues to struggle with how to explicitly include cultural identity into his curriculum and his ability to manage the controversial conversations that may ensue.

Upon analysis of the foundation and format of cultural awareness for each case study participant, data suggests that for, Claire, Charlie, and Sarah, who did not truly experience sustained cross-cultural interactions until they began teaching, their culturally responsive teaching behavior is impacted by conscious awareness of cultural identity and application of culturally responsive practices. For Melanie, Javier, and Brendan, who experienced sustained bicultural or cross-cultural interactions prior to teaching, their culturally responsive teaching behavior is simply hindered by their willingness and perceived ability to thoughtfully integrate cultural identity into their course curriculum. The data suggests that the foundation,

format and frequency of sustained cross-cultural interactions may impact a teacher's culturally responsive teaching self-efficacy.

Values-Influenced Teaching Philosophy. For six out of six participants a values-influenced teaching philosophy is salient in their teaching behavior, supporting the notion that stated beliefs can translate into expressed behavior. For instance, Claire places value on kindness, helping others, and developing learners and each of these are evident in her growth mindset approach to mathematics. Javier repeatedly expressed the significance of relationship building and his personal one-on-one interactions and incorporation of student input in his class demonstrate that value daily. The significance of mathematics to understand the world is what Melanie holds true, which is why she designs learning experiences that allow students to see math connectivity in everything. Charlie believes joy in learning can come from exposing students to diverse experiences, thus he organizes field trips and projects that meet that need. Personalization and building relationships with students matters to Sarah, so she does her best to joke with them and share parts of her life as well, in the hopes of reciprocal vulnerability. Brad esteems respect and equity which is demonstrated in how he differentiates student projects and actively seeks opportunities to bring female students and students of color into the science field. Lastly, each of the six participants places a high value on education which they believe is integral in social mobility and an improved quality of life for students. The fact that participants' beliefs show up so prominently in their teaching behavior suggests that if their beliefs about the benefits of culturally responsive pedagogy strengthened, their teaching behavior would follow.

Propensity for Professional Growth. Five out of six participants have previously participated in professional development or graduate courses designed to improve their

equitable practices in teaching, and for each of them the propensity toward professional growth appears to stem from a variation of self-doubt or lack of confidence in their teaching ability. The fear of failure and internalized self-doubt that Claire experienced as an adolescent has fueled her commitment to instill growth mindset in her own students. It has also led to her continual pursuit of professional development opportunities that expand her knowledge and expertise. Javier's self-doubt arises from his identification as a first year, thus novice teacher who is attempting to get better at all aspects of teaching. As a self-described introvert who prefers one-on-one interactions, Melanie admits that she hides behind math and craves more critique to help her grow as an educator. Charlie has struggled with his own confidence and would like to promote himself in a way that allows his colleagues and school administration to see what he has to contribute to further the development of the school and the organization. Brad, who consistently attends professional development and seeks opportunities to deliver it as well, still expresses trepidation in incorporating multicultural education into his science class, unsure of his ability to facilitate the emotions and conversations that may arise. Each of the six case study participants voluntarily opted to participate in this case study because they wanted to learn more about what it means to be a culturally responsive teacher and possessed a desire to improve their ability to do so.

Phase III: Post-Intervention Surveys and Improvement Pathway Process

Analysis

The six case study participants engaged in a specific intervention to improve their culturally responsive teaching and culturally responsive classroom management self-efficacy to answer research question 3) To what extent does each CRP Improvement Pathway impact culturally responsive pedagogy awareness, application, and self-efficacy assessment? As

previously mentioned, the researcher analyzed the distinct data that corresponded with each improvement pathway to evaluate instances of awareness and instances of application. Instances of awareness include occasions when knowledge, perception, recollection, discovery, or insight of a situation was present, instances of application include occasions when participants put a practice into operation, and self-efficacy was measured by re-taking the CRTSE and CRCMSE survey which was also used evaluate self-efficacy beliefs before and after the improvement pathway intervention. A brief description and analysis of the selection, conduction, and reflection of improvement pathway process is included for each participant.

Awareness, Application, and Self-Efficacy Assessment

Instances of awareness and application varied based on improvement pathway and the individual case study participant. More instances of awareness were recorded for participants who engaged in the Book Study with Collegial Coaching pathway whose instances ranged from 45-88, while instances of awareness from the other two improvement pathways ranged from 14-25. With the exception of one participant, instances of application ranged from 9-13, though the nature of applications encompassed a broad range of pedagogical moves. Table 5 displays the awareness and application frequencies for each participant.

Table 5. Instances of Awareness and Application Frequencies

Participant	Improvement Pathway	Awareness	Application
Claire	Book Study w/Collegial Coaching	75	10
Javier	Book Study w/Collegial Coaching	45	9
Melanie	Book Study w/Collegial Coaching	88	9
Charlie	Video w/Self-Assessment	25	13
Sarah	Video w/Self-Assessment	14	4
Brad	Professional Development Design and Delivery	22	13
Total		269	58

Increased culturally responsive teaching and culturally responsive classroom management self-efficacy scores was the primary intention of each improvement pathway intervention. Five out of six participants experienced increases in both the CRTSE and CRCMSE self-efficacy surveys. The Book Study with Collegial Coaching pathway participants' experienced the highest degree of growth for both CRTSE and the CRCMSE self-efficacy, followed by the Professional Development Design and Delivery pathway. The Video with Self-Assessment participants experienced the least amount of growth, with one participant reporting a lower score than reported on her pre-survey. A paired-samples t-test was conducted to compare the CRTSE and CRCMSE strength indexes of the six case study participants before and after the intervention. There was a significant difference found in the CRTSE pre-survey scores and the CRTSE post survey scores ($p < 0.020$). There was a significant difference found in the CRCMSE pre-survey scores and the CRCMSE post survey scores ($p < 0.050$). These results suggest that improvement pathways increased teachers culturally responsive teaching and classroom management self-efficacy. Table 6 displays the CRTSE and CRCMSE pre and post strength indexes for each case study participant.

Table 6. Case Study Participants’ CRTSE and CRCMSE Pre and Post Strength Indexes

Case Study Participant	Improvement Pathway	CRTSE PRE	CRTSE POST*	CRCMSE PRE	CRCMSE POST*
Claire	Book Study w/Collegial Coaching	60	70	63	85
Javier	Book Study w/Collegial Coaching	67	79	76	80
Melanie	Book Study w/Collegial Coaching	71	84	66	87
Charlie	Video w/Self-Assessment	79	86	77	82
Sarah	Video w/Self-Assessment	61	58	58	56
Brad	Professional Development Design and Delivery	70	79	73	84

Improvement Pathway Process and Benefits for Case Study Participants

Claire. When presented with the three pathways, Claire quickly ruled out the PD Design and Delivery pathway stating, “I feel so unqualified to be telling anyone about any of this stuff”, and after flipping through *Culturally Responsive Teaching and the Brain*, identifying some concepts of interest, she decided to move forward with the Book Study and Collegial Coaching pathway. Upon completion of all nine chapters and check-ins, Claire’s “Mindsets, Moves, and Musings” reflections indicated 75 instances of awareness and 10 instances of application. Two instances of awareness include her revelation that understanding her students’ backgrounds will allow her to connect with them and connect her curriculum to their lived experiences and that messages from school systems and structures have powerful influences over whether or not students possess a fixed or growth mindset. Two instances of her application include teacher-student appreciative inquiry lunches and

asset-based feedback protocols. At the end of the study, Claire completed the post-intervention survey which resulted in a CRTSE Index of 70 and a CRCMSE Index of 85.

During the end of study reflection interview, Claire stated her appreciation for the explicit intentionality of identifying and attempting new moves after each chapter and collecting data on the different strategies to determine what did and did not work. She also learned that lack of emotional safety in the classroom can impact information processing, and understands what role routines, rituals, and opportunities to learn and reflect in a native language play in personal and academic development, particularly for culturally and linguistically diverse students. The value added for Claire with this particular pathway was the ability to try out small interventions periodically and evaluate their effectiveness because by the end she built “a whole package of strategies” that she can continue to iterate on in the future. She enjoyed the frequency of the check ins and the accountability structure, however would have appreciated more focused time during her week to be able to devote to deeply understanding the content in the text and thoughtfully planning her culturally responsive teaching moves. Moving forward Claire hopes to cultivate more meaningful relationships with students, design multicultural math lessons that contribute to the development of students’ positive racial identity, and help students recognize their successes in an effort to build a mental portfolio of progress.

Javier. Despite concerns that the Book Study and Collegial Coaching pathway would be time consuming, Javier felt it was the best option for him. As a first-year teacher he did not feel qualified to deliver professional development to colleagues, nor was he comfortable enough in his teaching practice to engage in video self-assessment. Upon completion of all nine chapters and check-ins, Javier’s “Mindsets, Moves, and Musings” reflections indicated

45 instances of awareness and 9 instances of application. Two instances of awareness include his comprehension of cultural archetypes, collectivism and individualism or “We vs. Me mentality” and his recognition of teachers as coaches who direct and assist in an effort for students to develop their own sense of motivation. Two of his applications include student led Socratic seminars and student designed classroom warm-ups. At the end of the study, Javier completed the post-intervention survey which resulted in a CRTSE Index of 79 and a CRCMSE Index of 80.

During the end of study reflection interview, Javier stated that he found the coaching conversations most useful because it gave him the opportunity to discuss ideas, hear a different perspective, reflect on his practice, get instant input, and iterate on culturally responsive teaching moves. He shared that, “having to kind of dive into the text on a regular basis really just helped with spurring ideas and just having new thoughts about how to run my classroom and engage my students and improve as a teacher.” While he appreciated the pacing and accountability, he did wish there was more time in the day to fully digest what he was learning. As a result of this study, Javier realized that while he does well at building relationships with students, he needs to improve in holding students accountable, and he expressed his commitment to intentionally and routinely seek out the input of students and colleagues in order to improve his culturally responsive teaching practices.

Melanie. Melanie was most intrigued by the Book Study and Collegial Coaching pathway for two reasons, she had an upcoming surgery that would give her time to read and she liked the idea of learning, trying something out and then discussing how it went. Upon completion of all nine chapters and check-ins, Melanie’s “Mindsets, Moves, and Musings” reflections indicated 88 instances of awareness and 9 instances of application. A few instances

of awareness included the importance of connecting “cultural knowledge to content and concepts to help build the bridge students need to process new information”, how cognitive routines aid in students’ ability to learn how to learn, and that CRT [culturally responsive teaching] “isn’t a set of ‘things to try’ but rather turning pedagogical principles into teaching practice.” Two of her applications included empathy interviews with students and asset-based protocols for student feedback. At the end of the study, Melanie completed the post-intervention survey which resulted in a CRTSE Index of 82 and a CRCMSE Index of 87.

During the end of study reflection interview, Melanie shared that analyzing her classroom and teaching behavior through a purposeful lens was beneficial. It allowed her to notice and evaluate the message she was sending students through her daily routines, and to interrogate whether or not her classroom environment was conducive to equitable access and challenge for all of her students. Melanie reflected, “I like reading and I like accessing information that way, and so for me, getting to read about it, read it over again, look up a particular person, more research or whatever it was...I could take my time too. That was really important to me.” She also appreciated the pacing and accountability, yet at times felt that the amount of substantive content was challenging to retain throughout the course of a busy week. In addition to iterating on the culturally responsive teaching moves that Melanie attempted during the study, she expressed a desire to create a strong sense of community and an environment where risk taking and mistake making is celebrated.

Charlie. After hearing all three improvement pathway options, Charlie decided to do the Video Self-Assessment pathway based on the rationale that it was the one he was most “scared” to do. He also admitted the book study option would not work because he is a reluctant reader, and he did not have a strong enough foundation in culturally responsive

pedagogy to deliver professional development on it. Charlie completed five classroom observations and Dimensions of Equity Self-Assessments, four of the five were observed by the researcher. Charlie's self-assessments and coaching conversations indicated 25 instances of awareness and 13 instances of application. Two instances of awareness were discussion structures that permitted White students to dominate air time and learning to shift the cognitive load from teacher to student. Two instances of application were incorporating a text that offers multiple perspectives on human history with a particular focus on advantaged and disadvantaged human beings and the use of Socratic seminars and dialectical journals to provide students with opportunities to engage through writing and dialogue. At the end of the study, Charlie completed the post-intervention survey which resulted in a CRTSE Index of 86 and a CRCMSE Index of 82.

During the end of study reflection interview, Charlie felt he grew in content and curriculum awareness in terms of the readings, resources, and opportunities to which he exposed his students. He learned that the lived experiences of students are something that he would like to integrate into his pedagogy. Although he did find it challenging to watch and analyze himself with a critical lens, in terms of this specific pathway selection, he felt that the self-assessment was "a natural starting point" because he was able to identify his own areas of strength and growth in terms of becoming a culturally responsive educator while engaging in check-ins that held him accountable. As a result of this study, Charlie would like to engage in one-on-one meetings with all of his students early in the year to get to know them on a deeper level. He wants to challenge himself to integrate their sociopolitical contexts into the curriculum allowing for more engagement and authenticity.

Sarah. When presented with the three pathways, Sarah felt she was too “irresponsible” to read the book with fidelity and to inexperienced to engage in professional development delivery, so she opted for the Video Self-Assessment pathway, stating, “I want to make sure I can keep up my end of the bargain.” Due to Sarah’s time constraints and prioritized commitments, she was only able to complete two rounds of video, self-assessment, and debrief. On Sarah’s first Dimensions of Equity Self-Assessment she reflected her own inability to see many elements of culturally responsive pedagogy in her teaching practice. Consequently, during the debrief she justified the absence of multicultural and social justice education components by lamenting the time constraint she faces as a math teacher and repeatedly asserting culturally responsive pedagogy relevance in a Humanities classroom. She emphasized her goal is to teach math and that her attempts at equity and access are not targeted at any one specific group, rather how she teaches the entire class. During the second Dimensions of Equity Self-Assessment when presented with her disaggregated student data, she realized that her approach is not effective for all students. Black and Latino students and emergent bilinguals are disproportionately represented on her D/F list. Sarah stated, “My Latino and Latina students, I feel like, altogether, like, they’re the group that I feel like always falters first”, adding that she feels like she has a good relationship with them but does not know how to encourage them. “I feel like they just don’t care, I feel like I want to encourage them to care. And so, because they don’t care, then they don’t try”, she feels that students get so far behind and cannot see a way out. She expressed difficulty devoting time to students who struggle without “forfeiting the rest of [her] job too” and tends to rely on students to take the initiative and check in with her if they need support which she said, “is difficult when they don’t care, and they don’t have motivation.”

When asked to think of other explanations for why these specific groups of students could be struggling in her class, Sarah posited that it is possibly because students are shy, lack confidence to ask questions, do not have a strong math background, cannot keep up with the pace of the course, or do not have “involved” or “supportive” parents and would prefer a more step by step approach, placing the onus on the students themselves. Sarah experienced 14 instances of awareness and 4 instances of application. The most notable instance of awareness was her understanding of the four main types of deficit thinking that educators tend to possess when working with culturally and linguistically diverse students, which led to an honest discussion about her challenges with developing authentic relationships and academic accountability, particularly with her LatinX students and ended the debrief asking for help. When she was reminded of several resources the researcher provided her, she admitted that she still had not had a chance to look at them but plans to do so over the summer. Her instances of application centered on the tiered nature of individual, group, and classroom problem solving that was already a feature of her classroom pedagogy. At the end of the study, Sarah completed the post-intervention survey which resulted in a CRTSE Index of 58 and a CRCMSE Index of 56.

During the end of study reflection interview, Sarah discussed how helpful it was to observe herself and to have someone else in the room “who’s observing from a completely different lens” which added a beneficial accountability component to the process. She admits that she does not believe she has grown in terms of actual changes in her teaching behavior stating, and attributes her lack of growth to the insufficient time to explore the resources she received from the researcher in light of her other professional and personal commitments. Thus, while her video self-assessments made her aware of how she could improve, she was

unable to find time to research or engage in development that would advance her culturally responsive teaching behavior, stating, “I’m just more cognizant about how I’m going to improve for next year.”. Throughout the course of the study she realized that her connections with students were neither equitable, nor deep, particularly when it comes to her culturally and linguistically diverse students. In the future, Sarah hopes to push past superficial relationships with students, dive deep into student backgrounds, and take time to understand their past experiences in mathematics specifically.

Brad. After hearing all three improvement pathway options, Brad indicated that he was interested in engaging in all three pathways if that were an option, and then offered to engage in any pathway that was not selected by the other five participants which is how he selected the Professional Development (PD) Design and Delivery Pathway. Brad initially thought about facilitating a PD for the entire staff and then made the decision to design PD for the science department focused on equipping them to integrate multicultural education into their science curriculum. His rationale for this audience and focus is based on the fact that the Science department consists of five White males, four of whom are heterosexual, and all of whom he feels could benefit from content and skill improvement in multicultural education specifically. Brad decided to deliver a two-part PD to be facilitated during the Science departments bimonthly (every two weeks) department meeting which are 45 minutes in duration each, then administered a brief reflection survey to evaluate the effectiveness of the PD.

The researcher provided Brad with several resources to explore as he prepared for PD #1 and critiqued Brad’s PD plan. During PD #1, the researcher observed, took notes, and audio recorded the progression of the PD. Brad and the researcher debriefed PD#1 and then

planned for PD #2. Similar to the first PD, the researcher observed, took notes, and audio recorded the progression of the PD. Once both PD's were completed, Brad sent out a reflection survey which, once completed was reviewed by both Brad and the researcher to gain an understanding of how the PD sessions contributed to the Science teachers' awareness and application of culturally responsive pedagogy in general, and multicultural education in particular. Lastly, Brad and the researcher debriefed the entire Professional Development Design and Delivery Pathway. Upon completion of professional development design, delivery, and debrief, Brad experienced 22 explicit instances of awareness and 13 instances of application. Two instances of awareness were the importance of managing academic expectations in a way that integrates students' academic and cultural backgrounds and acknowledging his own positionality as a White, male, heterosexual Science teacher facilitating the learning of culturally and linguistically diverse students. Within his professional development workshops, two instances of his applications included creating a "Women in Science" slide deck to be integrated into science courses and facilitating a jigsaw discussion of a Chris Emdin article on Reality Pedagogy, a form of culturally responsive teaching. At the end of the study, Brad completed the post-intervention survey which resulted in a CRTSE Index of 79 and a CRCMSE Index of 84.

During the end of study reflection interview, Brad celebrated that he had been able to merge his personal drives and passions around Science education and culturally responsive pedagogy. He also grew in his interpretation of effective change ideas, and he is now confident that intentional small steps can result in successful outcomes even when trying to navigate pedagogy as complex and nuanced as culturally responsive teaching practice. He believes his pathway selection worked well for him because he was able to improve as a

culturally responsive practitioner and as a professional development designer and facilitator. One challenge he faced was the meticulous nature of the tool he introduced in his professional development series which took a substantial amount of time to create, thus he had to be more thoughtful when structuring the professional development so that it would be clear and engaging for adults. As a result of this study, Brad wants to delve into more sensitive, emotional, and potentially controversial content related to race and gender in Science. He has admittedly steered clear of these types of conversations in the classroom, fearful of mishandling the content and the discussion, but now would like to practice then design a tool to help other educators engage in this work more effectively.

Summary of Findings by Phase

Phase I. The researcher used a multiphase mixed-methods design that began with a background questionnaire, a Culturally Responsive Teaching Self-Efficacy Survey (CRTSE) and Culturally Responsive Classroom Management Self-Efficacy Survey (CRCMSE) administered during the first phase of the study. Upon statistical analysis completion, the study suggests that out of twenty-six background questionnaire variables, two variables, household income growing up and family status growing up, have an impact on CRTSE and CRCMSE strength indexes. Participants whose household income growing up was less than \$50,000 and participants who grew up with divorced, separated, or single parent households reported higher strength indexes.

Phase II. Six case study participants that were identified during Phase I of the study were interviewed during Phase II to elicit patterns between background, beliefs, and stated teaching behavior. Three themes were salient during this phase of analysis, cultural identity awareness, values-influenced teaching philosophy, and propensity for professional

growth. For all six case study participants, the foundation, format and frequency of their conscious exposure to cultural identity diversity influenced their recognition and comfortability with the integration of cultural identity into their classroom teaching and classroom management. For all six case study participants values that surfaced when they spoke about their childhood upbringing and teaching philosophy were present in their stated teaching behavior. For five out of six case study participants a willingness to grow and develop professionally in their ability improve equitable outcome for students was evidenced by their prior participation in equity centric professional development opportunities, their involvement in the current study, and their desire to continue to grow in their practice.

Phase III. Six case study participants were presented with three improvement pathway options designed to increase their culturally responsive teaching and classroom management self-efficacy: Book study with collegial coaching, professional development design and delivery with debrief, video self-assessment with debrief. The participants who engaged in the nine-chapter book study with collegial conversations experienced substantial growth in their culturally responsive teaching and culturally responsive classroom management self-efficacy scores, with an average CRTSE and CRCMSE Strength Index increase of 11 and 16 points, respectively. The participant who took part in the professional development design experienced notable increases, with a CRTSE and CRCMSE Strength Index increase of 9 and 11 points, respectively. The participants who took part in the video self-assessment pathway experienced mixed results as one participant reported an increase and the other participant reported a decrease. The average increase in their CRTSE and CRCMSE Strength Index increase was 2 and 1.5 points, respectively.

At the conclusion of the study, five out of six participants felt that the collegial coaching and debrief conversations provided a much needed accountability structure that assisted in their growth. All six participants expressed a hope to continue the exploration and application of what they were introduced to during their improvement pathway process, which suggests a likelihood of further improvement in their culturally responsive teaching and classroom management self-efficacy.

Synthesis of Findings

The results of this study suggest that certain background experiences may shape teaching philosophy and classroom behavior. Cultural identity exposure, whether it occurs during adolescence or adulthood, appears a driver in a teacher's conscious awareness and comfortability acknowledging and incorporating cultural dispositions in the classroom. Similar to experiences and exposure, values acquired during childhood and sustained during adulthood guide teaching philosophy and seem to also influence teaching behavior. However, prior knowledge is not the only phenomenon that shapes a practitioner's pedagogy; professional development and sustained coaching can also impact teaching behavior. The findings suggest that educator vulnerability and a willingness to engage in transformative courses of action are necessary for meaningful professional and personal growth. Moreover, it may be the case when teachers possess a growth mindset and a penchant for improvement pathways that center on culturally responsive pedagogy, it may lead to increased awareness and application in their practice. If and when an educator does decide to engage in an improvement pathway, successful instances of application in the form of performance accomplishments seems to hold the potential for greater increases in culturally responsive teaching and classroom management self-efficacy; and these instances of application are more

likely to continue when accountability structures that encompass reflective dialogue with another practitioner are in place.

CHAPTER V: DISCUSSION

Overview of the Problem

The demographics of American public education are gradually shifting to reflect the increasing racial and ethnic composition of the nation's inhabitants. Regrettably, opportunity gaps, and by extension, achievement gaps continue to persist at all levels of education for culturally and linguistically diverse students. This disparity in educational attainment negatively impacts opportunities that students of color will have, specifically as it pertains to college and career readiness. The scholarship on culturally responsive pedagogy gives credence to the academic and socioemotional benefits this approach provides for culturally and linguistically diverse students. Such widespread, advantageous results seem to justify further dissemination of this approach. However, research also suggests that a teacher's understanding of her own cultural positionality and her ability to possess a degree of self-efficacy in meeting the needs of diverse learners has an impact on her ability to embody and execute culturally responsive teaching and classroom management.

Thus, the purpose of this research study was to utilize quantitative and qualitative methods to investigate the intersectionality of teachers' backgrounds, beliefs, and stated pedagogical behavioral, to explore culturally responsive teaching and classroom management improvement pathways, and to better understand the extent to which self-selected improvement pathways lead to increases in a teacher's culturally responsive teaching and classroom management self-efficacy. More specifically, the following research questions were addressed in this study: 1) How do educators' backgrounds impact their culturally responsive teaching and classroom management self-efficacy? 2) To what extent do teachers' backgrounds and beliefs impact their stated teaching behavior? and 3) In what ways does each

culturally responsive improvement pathway impact culturally responsive pedagogy awareness, application, and culturally responsive teaching and classroom management self-efficacy assessment?

This chapter offers a summary of the findings that connects to existing scholarship and theory discussed previously in Chapter II, and provides implications for policy, leadership, and practice. The chapter concludes with limitations of the study and recommendations for future research.

Summary and Analysis of Findings

The findings for research question 1) How do educators' backgrounds impact their culturally responsive teaching and classroom management self-efficacy?, indicate that for this particular survey sample two variables had a significant impact on teachers' CRTSE and CRCMSE scores. Household income growing up and family status growing up were the two variables out of twenty-six that had an impact on CRTSE and CRCMSE strength indexes on this particular sample of teachers. Participants in the study whose household income growing up was less than \$50,000 and participants who grew up with divorced, separated, or single parent households reported higher strength indexes.

Within this sample of teachers, findings indicate that participants from low socioeconomic backgrounds and participants who grew up in non-nuclear households may have developed a greater sense of empathy as a result of their upbringing, thus perhaps view themselves as teachers who are attentive to the needs of their diverse student population. The researcher's initial assumptions were that certain background characteristics related to identity, particularly race, might play a role in a teacher's culturally responsive teaching self-efficacy. However, the findings for this particular sample clearly denote that for the vast

majority of cultural identifiers there was no significant impact on participants' sense of culturally responsive teaching and classroom management self-efficacy. This finding aligns with existing research that suggests the ability to teach in a culturally responsive manner can be indiscriminate (Gay, 2002; Sampson & Garrison-Wade, 2010; Vilson, 2014; Pewewardy et al., 2003), however the impact of background on culturally responsive pedagogy self-efficacy warrants further investigation.

The three principal findings for research question 2) To what extent do teachers backgrounds and beliefs impact their stated teaching behavior? suggest that for this particular sample the foundation, format, and frequency of cultural identity exposure impacts the ability to incorporate cultural identity in the classroom, values acquired during childhood and sustained during adulthood guide teaching philosophy which has an impact on teaching behavior, and a willingness to unlearn, learn, and relearn is essential to adaptive behavioral change.

In the case of these six teachers, frequent exposure to diverse cultural identities has the potential to help teachers feel more comfortable engaging in cross-cultural interactions, and in turn better meet the needs of their distinct classroom populations. Formats that support increased cultural identity knowledge are person to person interactions and exposure to multifaceted literature and history that shares the perspective of marginalized and underrepresented groups. These findings lend support to the significance of critical race theory tenets and their ability to increase cultural identity awareness. Prior to the start of this study, the centrality and intersectionality of race and racism, the challenge to dominant ideology, the centrality of experiential knowledge, and the interdisciplinary perspective (Solarzona, 1997), tenets essential to promoting societal change for marginalized youth, were

essentially absent in the classroom practice of five out of six participants. Commitment to social justice was present in two out of six participants, and one participant expressed three of the tenets, though not in depth.

The salience and continuity of values present in teachers' backgrounds, beliefs and stated teaching behaviors, indicates that if individuals are reared to acknowledge and honor diverse cultural identities, they are likely to maintain this value as a part of their belief system, thus they might be more inclined to integrate it into their teaching practice. A propensity for professional and growth and development signals an acknowledgement that there is room for improvement and a willingness to do what is necessary to achieve growth. Openness, vulnerability, and growth mindset seem important if substantive and measurable improvements are to occur. Educators who are actively seeking and engaging in educational experiences that improve their ability to interrupt patterns of inequity and promote patterns of promise, are likely to be more successful at serving culturally and linguistically diverse students. Exploring the ways in which openness, vulnerability, and growth mindset manifest in educators in order to identify opportunities to operationalize them.

Research question 3) In what ways does each culturally responsive improvement pathway impact culturally responsive pedagogy awareness, application, and culturally responsive teaching and classroom management self-efficacy assessment? surfaced a few key findings. Increased awareness and application of culturally responsive pedagogy positively impact teacher efficacy, interventions that include performance accomplishments result in higher increases in culturally responsive instruction efficacy, and collegial accountability structures increase the likelihood of culturally responsive instruction integration.

Within this sample of teachers there are specific justifications that illuminate why each group experienced varied improvements in their self-efficacy. First, the book study with collegial coaching participants were introduced to numerous concepts through the foundational text and supplementary handouts, thus their learning was grounded in well researched practices. Second, the frequency and dialogical nature of collegial coaching check-in's allowed for conversations that stimulated thoughts, ideas, and questions, which helped to deepen understanding. By prioritizing a catalytic coaching model, participants were able to engage in self-discovery, self-directed learning and problem solving. Third, the nature of this pathway had a level of accountability in that after each chapter check in participants were required to come up with a "teaching move" that they would try out in their classroom and debrief in the subsequent check in. This provided space for behavioral change to occur. With each iteration of learning whether it was successful or not, the participants were able to build their confidence in trying new approaches to be more culturally responsive to students.

In the case of the participant who selected the professional development design and delivery pathway, the participant was tasked with doing independent research around culturally responsive pedagogy guided by the researcher. Due to the nature of this pathway, the participant was responsible for increasing the awareness and application of culturally responsive practices for his colleagues, hence an accountability component was inherent in the process. The participant was essentially tasked with expanding his own knowledge and expertise in order to credibly build capacity in others.

The modest CRTSE/CRCMSE increase in one of the video self-assessment participants and decrease in the other may be explained by the fact that their initial self-confidence around culturally responsive pedagogy was prior to a more in-depth understanding

of its nature and purpose. When asked to observe their classroom behavior and self-identify culturally responsive practices, they experienced a heightened awareness of ways in which they were not as culturally responsive as they previously thought. In light of this particular pathway's absence of core knowledge base, it relies on the teacher's own ability to evaluate and make adjustments as needed. However, it places teachers in a position of unconscious incompetence, when they are incapable of noticing deficits in their teaching practice, or conscious incompetence, when they are aware of deficits in their ability but are unsure of how to improve or progress. The results from this particular pathway indicate that while video self-assessment is a step toward teachers identifying their strengths and areas for growth as they strive to be more culturally responsive, in order to make notable gains in self-efficacy, there needs to be some degree of content knowledge, coaching, and accountability. Thus, an improvement pathway that scaffolds video self-assessment, book study, and collegial coaching could allow educators to move from conscious incompetence to conscious competence more effectively.

The results rendered from all three pathways are consistent with the four treatments of self-efficacy theory (Bandura, 1997). Performance accomplishments are the strongest information source that lead to sustained behavioral change, thus the three book study participants and the professional development design and delivery participant who were each held accountable to applying their knowledge, experienced the highest increases in self-efficacy. The video self-assessments engaged in an information source that yields minimal behavioral change, verbal persuasion. Simply hearing rationale, suggestions, or motivations about why engaging in a particular practice could be beneficial, does not require nor equip the teacher to change their teaching behavior. Thus, the more opportunities teachers have to

practice in real or role play format, the stronger the likelihood of self-efficacy development. At the end of the study all six participants expressed a hope to continue the exploration and application of what they were introduced to during their improvement pathway process, a hopeful indicator for scale and spread of this process.

Implications: Theory, Policy, Leadership, Practice

Theory. The most notable implication for theory is the way in which Critical Race Theory (CRT) and Self-Efficacy Theory (SET) can operate in tandem in service of culturally responsive pedagogy implementation as they collectively combine knowledge with action and belief with behavior. CRT tenets are foundational to culturally responsive pedagogy and, as a social theory, CRT helps explain and analyze the intersectionality of backgrounds and beliefs. It can also be utilized to help ascertain how teachers' background and beliefs position their readiness to be culturally responsive teachers. As a learning theory, SET is used to study the predictive power of cognitive ability on behavioral change, thus it helps to explain and analyze the intersectionality of beliefs about self and behavior. In essence, CRT helps researchers understand where teachers are on their path to becoming culturally responsive, while SET helps researchers understand how to move teachers along the path in a positive direction. This study indicates that a person's beliefs are formed by their background experiences and a person's behavior is informed by their beliefs. Thus, the excavation of background experiences and beliefs, and how they impact teaching behavior creates space to interrupt prejudicial practices such as deficit thinking and the myth of meritocracy which impede the growth and development of students of color. It simultaneously provides teachers with an opportunity to iterate on promising practices that they already possess to cultivate positive cultural identity and develop intellectual capacity in their culturally and linguistically

diverse students. These interruptions and iterations surfaced during the improvement pathway process in a way that illuminated the meaningful integration of CRT and SET as theoretical frameworks.

Policy. The Every Student Succeeds Act (ESSA) provides discretion to states and individual institutions to ensure that all students learn in an environment that is safe, secure and focused on college and career readiness (U.S. Department of Education, 2017). This autonomy and freedom paves a path for the inclusion, spread and scale of culturally responsive pedagogy. Particularly because it aligns with desired outcomes such as, growth-oriented teacher evaluation opportunities, improvement focused student assessments, and student-centered initiatives that are collaboratively designed (Charnov, 2016). In California for instance, in collaboration with families and the greater community, districts and schools have the ability to design policy that integrates culturally responsive pedagogy into their Local Control and Accountability Plan (LCAP). As the research of Irizarry and Gonzalez (2007) previously demonstrated, when students' families and the neighboring community are viewed as resourceful allies, teachers are more inclined to recognize the funds of knowledge and cultural capital students' possess, which allows for an enriching educational experience for students and teachers alike.

Ongoing culturally responsive pedagogy professional development and coaching, informed by all stakeholders including district leaders, school leaders, teachers, parents, students and the wider community, could have a tremendous impact on the growth of novice and veteran teachers. More importantly, as teachers' efficacy related to meeting the needs of culturally and linguistically diverse students improves, so does their likelihood of closing opportunity and achievement gaps for their students. Numerous studies demonstrate the

potential of culturally responsive pedagogy to positively alter students' beliefs and behaviors and provides them with a greater chance of economic prosperity in and outside of school. Thus, thoughtful education policy can echo forward in the lives of students and lead to increased opportunities, an improved quality of life, and the access that intellectual privilege can provide.

Leadership. The leadership implications associated with culturally responsive pedagogy begin with school leaders acknowledging the plethora of positive benefits that stem from culturally responsive pedagogy. Simply by incorporating these practices schoolwide, school principals who serve culturally and linguistically diverse students can experience notable improvements in student engagement, behavior, outlook, opportunity, and achievement. Nonetheless, this cultural shift begins with school leaders examining their own sociopolitical consciousness. When leaders create space for introspection that allow them to acknowledge their positionality as it relates to their staff and students, they provide an example for educators and students to do the same. It is often easier to motivate staff and faculty when leaders exemplify what they are asking from their colleagues. By capitalizing on the unique strengths and versatility of teachers, school leaders can tap into a network poised to incorporate culturally responsive pedagogy in an authentic way and build capacity in teachers who may be less comfortable adapting their pedagogical practices. These teacher transformations could yield greater success if school leaders provide teachers with choice in their path to progress. Frequently professional development experiences are not culturally responsive because faculty is forced to participate in the exact same process despite the myriad ways in which individuals learn. As evidenced by the three improvement pathways utilized in this study, participants selected pathways that they believed best suited their

interests and capacity for learning. School leaders can employ this approach to spread and scale culturally responsive pedagogy at their own institutions.

In order to accurately assess the culturally responsive climate at their school site, school leaders could initiate an equity audit to evaluate institution wide practices that are either hindering or helping students of color. This knowledge can lead to community walks, empathy interviews, professional development, and a host of possibilities that lead to meeting the academic, social, and emotional needs of culturally and linguistically diverse students. If these in-house transformations are to occur, leadership would need to fully embrace, embody, and embed culturally responsive practices into their own leadership philosophy. Thus, extensive studies that center on the training of culturally responsive leaders, and equally as important, leadership's ability to empower teachers to meet the needs of all students. By engaging in an in-depth investigation, and ultimately reform of, structures, policies, and practices in the institutions they lead, leaders can avoid equity traps that inhibit student progress. Leaders would need to make an intentional effort to know the communities their students come from, understand their unique needs and assets, then care enough to respond in a meaningful way.

Practice. This study offers implications for practice in four key areas, awareness, application, accountability, and appetite. The findings suggest that teachers who have authentic awareness of their cultural disposition are able to interrupt inequitable practices in their teaching behavior. Similarly, teachers who have an awareness of the cultural dispositions of their students coupled with awareness of the myriad benefits of culturally responsive pedagogy, can develop a view of their students that is both strengths based and growth oriented. Multifaceted awareness can lead to meaningful application of culturally responsive

pedagogy. Performance tasks produce higher increases in self-efficacy, thus careful and continuous application is essential. When teachers have time, space, support and opportunities to authentically apply this form of pedagogy to their teaching practice, they grow in self-confidence, their ability to engage in the practices more regularly, and are better equipped to serve their culturally and linguistically diverse students. These results corroborate previous studies that utilized sustained professional development to increase awareness and application of culturally responsive practices (Patton, 2011; Voltz et al. 2011).

This study further illustrates the importance of accountability in behavioral change. Implementing structures that ensure reflection on teaching behavior and conversations with a colleague provides an accountability system that is integral in the motivation and persistence of application. It is challenging for an educator to experience genuine practitioner progress in isolation, which is why the role of an external support provider is important. Collegial coaches help hold a mirror to teaching practices by reflecting areas of strength and areas for growth, yet at the same time coaches wield a window into insights, strategies, validation, and motivation that improve teacher efficacy. Yet, even if teachers have awareness, paths for application, and accountability structures, they must have an appetite, or will, to actually operationalize the knowledge, resources, and support in a way that truly benefits the academic and social needs of their students. Educators may have access to coaches, resources, strategies, and other systems of support, however awareness and skill are insufficient in the absence of will, or a genuine desire to engage in the work.

Limitations

This study sought to answer key questions related to in-service teachers and their capacity to confidently engage in culturally responsive pedagogy, however there were a few

limitations to the study. First, due to the small sample size and the unique nature of the research site the study may not be generalizable to other contexts. More varied contexts are needed to acquire sufficient data for generalizability. The research site consists of approximately twenty-five classroom teachers which makes it challenging to conduct inferential statistics with concrete predictive power. In addition, the teacher autonomy and design principles of the research site represent high degrees of freedom when it comes to curriculum and practice flexibility. This philosophy of teacher as designer will allow culturally responsive innovation and iteration to flourish if desired. Unfortunately, many of these freedoms are not available to teachers who work in more traditional school settings and may be expected to follow a pacing guide or a standard set of curriculum that inhibits them from exercising agency in curriculum design and implementation, regardless of its benefit to students. Second, in order to elicit honest responses, with the exception of the case study participants, the surveys were anonymous. This anonymity made it impossible to conduct pre- and post-assessments for the non-case study participants.

Third, is the limitation related to participant selection. Teachers were asked to notify the researcher of their willingness to be considered for the case study and this leads to self-selection bias which undermines randomization. Lastly, the researcher's positionality was also a considerable limitation. Two significant aspects of researcher identity had the potential to impact the study, her position within the organization and her cultural identity. The researcher's current position may be perceived as administrative which could have prevented participants from responding honestly to the survey, speaking their truth during the interviews, or reporting challenges they may have encountered with program interventions. These perceptions were minimized by reassuring case study participants that their information

was kept confidential and that the researcher had no desire nor power to negatively impact their position within the organization. As an African American female from a low socioeconomic background, a study on culturally pedagogy is deeply connected to the researcher's hopes and desires for the future of culturally and linguistically diverse students. Case study participants may have felt compelled to respond a certain way or may have refrained from speaking honestly in an attempt to appease the researcher. In order to mitigate potential effects, bias conscious procedures, member checking, and triangulation of data were essential components of the study. Although no study is without limitations, the researcher worked to reduce the number of major and minor limitations in the study.

Recommendation for Future Research

School leaders and teachers can have a dramatic impact on shaping a culturally responsive school and classroom environment. A substantial amount of research discusses the use of culturally responsive education in urban schools with higher populations of students of color, and in places such as charter, magnet, or independent schools where teachers experience higher degrees of curriculum autonomy. The scholarship indicates that this type of educational reform is possible at schools where administrators exercise their power to establish policies and design structures that respect and respond to a diverse student body, while integrating the funds of knowledge that exist in the neighboring communities. Thus, expanded research that centers on the cultivation of culturally responsive school leaders and their role as positive influencers of policy and practice among their faculty is needed. Likewise, fundamental teacher characteristics, particularly sociopolitical consciousness, strengths based thinking, and co-construction of knowledge, are fundamental to the success of a culturally responsive educational experience. Thus, holistic district level or campus level

reform focused on culturally responsive pedagogy can be an integral step toward closing opportunity gaps for culturally and linguistically diverse students.

Although there are numerous researchers who espouse the merits of this pedagogy (Aronson & Laughter, 2016; Ladson-Billings, 1998; Gay, 2010), there are gaps in the field regarding the scale of its widespread impact. A significant limitation in the field is that individual case studies and small sets of success stories based on qualitative research are moving, and perhaps replicable; however, more quantitative studies that track academic achievement over time, as well as increased sample sizes, could strengthen the research surrounding culturally responsive pedagogy. The majority of studies focus on teachers and students in urban or high poverty school districts, and do not address suburban and rural environments where faculty and students can also benefit from this form of pedagogy. Additionally, while a few researchers hint at the positive impacts of culturally responsive pedagogy on Caucasian students, more studies are needed to identify how and to what degree Caucasian students advantageously benefit from this approach. Comprehensive research that compares the progress of students from *all* backgrounds would provide a more compelling argument for school administrators and policy makers.

Furthermore, research that examines the most effective approach to disseminate culturally responsive pedagogy, or the type of accountability systems that ensure its use, is limited. More applied research is needed on the effectiveness of in-house culturally responsive support specialists who could serve as a resource for faculty. Relying on ad-hoc professional development may not be effective, nor sustainable. Thus, examining designated teachers who are passionate about, and trained in culturally responsive pedagogy, would be beneficial in order to better understand if these specialists can provide all teachers at the

school site with an accessible and effective support system. Lastly, a study that develops a student version of the CRTSE/CRCMSE survey in order to test for alignment between teacher and student perceptions would incorporate perhaps the most significant voices in education, the students, and would allow for a comparison study of teacher culturally responsive instruction self-efficacy and student academic outcomes. After careful examination of limitations in the scholarship related to culturally responsive pedagogy, it is clear that a myriad of research opportunities exists to further the body of evidence in support of a movement positioned to close the opportunity gap for culturally and linguistically diverse students and enlighten the worldview of all students.

Conclusion

Culturally responsive pedagogy does not replace mainstream content, it simply serves to provide a balance of perspectives to combat the notion of one single historical narrative, one dimensional instructional approaches, and one course of learning based on priorities of the perceived dominant culture in an effort to create a socially just education experience for *all* students. In addition to academic outcomes, culturally responsive pedagogy can reduce the degree of internalized oppression that can occur after years of racial erasure, implicit bias, and deficit-based thinking inflicted on culturally and linguistically diverse students. Culturally responsive pedagogy also has the ability to increase cross cultural awareness because students who develop a legitimate sense of pride in their cultural identity, as well as knowledge in the cultural identity of others have a stronger likelihood of maintaining healthy and productive cross-cultural relationships. Perhaps most importantly, culturally responsive pedagogy has the potential to develop the intellectual capacity of each and every student, regardless of their

sociocultural identity, and position them to confidently and competently lead lives of their own making.

The changing demographics of the United States, and by extension the national student body, confronted with the stagnant phenotypic composition of teachers, necessitates a change in the way students are educated in this country. To sit idly by in the hopes that educators will adapt their teaching practices of their own volition, absent of deep inquiry, external knowledge input, and consistent accountability, is a naive assumption and marginalized students are paying the price. Especially when there are a plethora of ways for practitioners to become culturally responsive and develop self-efficacy in their ability to serve students of color, students who learn differently, students from low socioeconomic backgrounds, and emergent bilinguals.

The implementation of culturally responsive pedagogy has profound implications for policy and practice that are steeped in social justice. Education is one of the very few life choices that does not result in diminishing marginal utility, because the more students learn, the better equipped they are to fully experience the world in which they live. Students who are engaged and academically stimulated in school are more likely to attend college, and students who graduate college will have significantly more opportunities than students who only graduate high school, especially in comparison to those who dropout of high school altogether. Success in education is vitally linked to success in life, and teachers are very much like physicians. Instead of fighting to save a student's biological life, they are fighting to save a student's quality of life. And that fight should not be selective. It should not produce winners who are primarily from one race, one income level, or who represent one style of learning. That fight should be for *all* students. The ultimate measure of progress is when

educators across the country can enter their classrooms to see a diverse representation of humanity, examine their disaggregated data to find it void of predictable patterns of achievement, and elevate students' cultural capital to discover their collective brilliance and unlimited potential.

Appendix A: Culturally Responsive Teaching Self Efficacy Survey

Culturally Responsive Teaching Self-Efficacy Scale

Rate how confident you are in your ability to successfully accomplish each of the tasks listed below. Each task is related to teaching. Please rate your degree of confidence by recording a number from 0 (no confidence at all) to 100 (completely confident). Remember that you may use any number between 0 and 100.

0	10	20	30	40	50	60	70	80	90	100
No					Moderately					Completely
Confidence					Confident					Confident
At All										

I am able to:

- _____ 1. adapt instruction to meet the needs of my students.
- _____ 2. obtain information about my students' academic strengths.
- _____ 3. determine whether my students like to work alone or in a group.
- _____ 4. determine whether my students feel comfortable competing with other students.
- _____ 5. identify ways that the school culture (e.g., values, norms, and practices) is different from my students' home culture.
- _____ 6. implement strategies to minimize the effects of the mismatch between my students' home culture and the school culture.
- _____ 7. assess student learning using various types of assessments.
- _____ 8. obtain information about my students' home life.
- _____ 9. build a sense of trust in my students.
- _____ 10. establish positive home-school relations.
- _____ 11. use a variety of teaching methods.
- _____ 12. develop a community of learners when my class consists of students from diverse backgrounds.
- _____ 13. use my students' cultural background to help make learning meaningful.
- _____ 14. use my students' prior knowledge to help them make sense of new information.
- _____ 15. identify ways how students communicate at home may differ from the school norms.
- _____ 16. obtain information about my students' cultural background.
- _____ 17. teach students about their cultures' contributions to science.
- _____ 18. greet English Language Learners with a phrase in their native language.
- _____ 19. design a classroom environment using displays that reflects a variety of cultures.

0	10	20	30	40	50	60	70	80	90	100
No					Moderately					Completely
Confidence					Confident					Confident
At All										

I am able to:

- _____ 20. develop a personal relationship with my students.
- _____ 21. obtain information about my students' academic weaknesses.
- _____ 22. praise English Language Learners for their accomplishments using a phrase in their native language.
- _____ 23. identify ways that standardized tests may be biased towards linguistically diverse students.
- _____ 24. communicate with parents regarding their child's educational progress.
- _____ 25. structure parent-teacher conferences so that the meeting is not intimidating for parents.
- _____ 26. help students to develop positive relationships with their classmates.
- _____ 27. revise instructional material to include a better representation of cultural groups.
- _____ 28. critically examine the curriculum to determine whether it reinforces negative cultural stereotypes.
- _____ 29. design a lesson that shows how other cultural groups have made use of mathematics.
- _____ 30. model classroom tasks to enhance English Language Learner's understanding.
- _____ 31. communicate with the parents of English Language Learners regarding their child's achievement.
- _____ 32. help students feel like important members of the classroom.
- _____ 33. identify ways that standardized tests may be biased towards culturally diverse students.
- _____ 34. use a learning preference inventory to gather data about how my students like to learn.
- _____ 35. use examples that are familiar to students from diverse cultural backgrounds.
- _____ 36. explain new concepts using examples that are taken from my students' everyday lives.
- _____ 37. obtain information regarding my students' academic interests.
- _____ 38. use the interests of my students to make learning meaningful for them.
- _____ 39. implement cooperative learning activities for those students who like to work in groups.
- _____ 40. design instruction that matches my students' developmental needs.
- _____ 41. teach students about their cultures' contributions to society.

Appendix B: Culturally Responsive Classroom Management Self Efficacy Survey

Culturally Responsive Classroom Management Self-Efficacy Scale

Directions: Rate how confident you are in your ability to successfully accomplish each of the tasks listed below. Each task is related to classroom management. Please rate your degree of confidence by recording a number from 0 (no confidence at all) to 100 (completely confident). Remember that you may use any number between 0 and 100.

0	10	20	30	40	50	60	70	80	90	100
No					Moderately					Completely
Confidence					Confident					Confident
At All										

I am able to:

- _____ 1. Assess students' behaviors with the knowledge that acceptable school behaviors may not match those that are acceptable within a student's home culture
- _____ 2. Use culturally responsive discipline practices to alter the behavior of a student who is being defiant
- _____ 3. Create a learning environment that conveys respect for the cultures of all students in my classroom
- _____ 4. Use my knowledge of students' cultural backgrounds to create a culturally compatible learning environment
- _____ 5. Establish high behavioral expectations that encourages students to produce high quality work
- _____ 6. Clearly communicate classroom policies
- _____ 7. Structure the learning environment so that all students feel like a valued member of the learning community
- _____ 8. Use what I know about my students cultural background to develop an effective learning environment
- _____ 9. Encourage students to work together on classroom tasks, when appropriate
- _____ 10. Design the classroom in a way that communicates respect for diversity
- _____ 11. Use strategies that will hold students accountable for producing high quality work
- _____ 12. Address inappropriate behavior without relying on traditional methods of discipline such as office referrals
- _____ 13. Critically analyze students' classroom behavior from a cross-cultural perspective
- _____ 14. Modify lesson plans so that students remain actively engaged throughout the entire class period or lesson
- _____ 15. Redirect students' behavior without the use of coercive means (i.e. consequences or verbal reprimand)

0	10	20	30	40	50	60	70	80	90	100
No Confidence At All					Moderately Confident					Completely Confident

I am able to:

- _____ 16. Restructure the curriculum so that every child can succeed, regardless of their academic history
- _____ 17. Communicate with students using expressions that are familiar to them
- _____ 18. Personalize the classroom so that it is reflective of the cultural background of my students
- _____ 19. Establish routines for carrying out specific classroom tasks
- _____ 20. Design activities that require students to work together towards a common academic goal
- _____ 21. Modify the curriculum to allow students to work in groups
- _____ 22. Teach students how to work together
- _____ 23. Critically assess whether a particular behavior constitutes misbehavior
- _____ 24. Teach children self-management strategies that will assist them in regulating their classroom behavior
- _____ 25. Develop a partnership with parents from diverse cultural and linguistic backgrounds
- _____ 26. Communicate with students' parents whose primary language is not English
- _____ 27. Establish two-way communication with non-English speaking parents
- _____ 28. Use culturally appropriate methods to relate to parents from culturally and linguistically diverse backgrounds
- _____ 29. Model classroom routines for English Language Learners
- _____ 30. Explain classroom rules so that they are easily understood by English Language Learners
- _____ 31. Modify aspects of the classroom so that it matches aspects of students' home culture
- _____ 32. Implement an intervention that minimizes a conflict that occurs when a students' culturally-based behavior is not consistent with school norms
- _____ 33. Develop an effective classroom management plan based on my understanding of students' family background
- _____ 34. Manage situations in which students are defiant
- _____ 35. Prevent disruptions by recognizing potential causes for misbehavior

Appendix C: Semi-Structured Interview Questions

Interviewer
Participant
Title
Date
Time of Interview
Place

How long have you been teaching?
What made you decide to become a teacher?
What is your teaching philosophy? What do you consider to be your core beliefs about teaching?
Questions that connect back to demographic questionnaire (gender, race/ethnicity, etc.), experiences, and interests.
How do you think particular elements of your background shaped your beliefs about the world? Your beliefs about yourself?
How do you think your beliefs about the world influence your behavior?
How do you think your beliefs about self influence your behavior?
How do you think your beliefs about the world have influence your teaching practices?
How do you think your beliefs about self influence your teaching practices?
In what ways does this school environment support your growth and development as a teacher?
In what ways does this school environment inhibit your growth and development as a teacher?
In what ways does school leadership support your growth and development as a teacher?
In what ways does school leadership inhibit your growth and development as a teacher?
You selected Improvement Pathway_____, why?

Appendix D: Dimensions of Equity Self-Assessment
Created based on Zaretta Hammond's "Dimensions of Equity Chart"

DIMENSIONS OF EQUITY As equity-focused educators, it is important to distinguish between three key areas in education: <i>multicultural education</i>, <i>social justice education</i>, and <i>culturally responsive teaching</i>. Too often the terms are used interchangeably when they are not. Below is a simple chart to help you understand the distinctions between them. A key point to remember, only CRT is focused on the cognitive development of under-served students. Multicultural and social justice education have more of a supporting role in culturally responsive teaching.		
MULTICULTURAL EDUCATION	SOCIAL JUSTICE EDUCATION	CULTURALLY RESPONSIVE PEDAGOGY
Focuses on celebrating diversity	Focuses on exposing the social political context that students experience	Focuses on improving the learning capacity of diverse students who have been marginalized educationally
Centers around creating positive social interactions across difference	Centers around raising students' consciousness about inequity in everyday social, environmental, economic, and political aspects of life	Centers around the affective & cognitive aspects of teaching and learning
Concerns itself with exposing privileged students to diverse literature, multiple perspectives, and inclusion in the curriculum as well as help students of color see themselves reflected.	Concerns itself with creating lenses to recognize and interrupt inequitable patterns and practices in society.	Concerns itself with building resilience and academic mindset by pushing back on dominant narratives about people of color.
Social Harmony	Critical Consciousness	Independent Learning

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Self-Assessment Instructions

Please watch the video of your lesson and complete the Dimensions of Equity Self-Assessment (you may decide to watch it more than once). There are three dimensions and three competencies that accompany each dimension. As you watch your video, please do the following:

1. Read each competency and identify whether or not it was present in your lesson.
2. If you select "yes", in the "Evidence" section provide a brief description of when it occurred during the lesson. If you select "no", you can move on to the "self-rating" section.
3. Give yourself a competency score from 0 (no presence)-4 (strong presence).
4. Complete the two open ended prompts.

Multicultural Education: refers to any form of education or teaching that incorporates the histories, texts, values, beliefs, and perspectives of people from different cultural backgrounds. At the classroom level, for example, teachers may modify or incorporate lessons to reflect the cultural diversity of the students in a particular class. In many cases, “culture” is defined in the broadest possible sense, encompassing race, ethnicity, nationality, language, religion, class, gender, sexual orientation, and “exceptionality”—a term applied to students with specialized needs or disabilities (The Glossary of Education Reform).

Focuses on celebrating diversity		
Present:	Evidence:	Self-Rating:
• Yes • No		0 1 2 3 4
Centers around creating positive social interactions across difference		
Present:	Evidence:	Self-Rating:
• Yes • No		0 1 2 3 4
Concerns itself with exposing privileged students to diverse literature, multiple perspectives, and inclusion in the curriculum as well as help students of color see themselves reflected		
Present:	Evidence:	Self-Rating:
• Yes • No		0 1 2 3 4

Social Justice: the distribution of advantages and disadvantages within a society (Dictionary.com)

Focuses on exposing the social political context that students experience		
Present:	Evidence:	Self-Rating:
• Yes • No		0 1 2 3 4
Centers around raising students’ consciousness about inequity in everyday social, environmental, economic and political aspects of life		
Present:	Evidence:	Self-Rating:
• Yes • No		0 1 2 3 4
Concerns itself with creating lenses to recognize and interrupt inequitable patterns in society		
Present:	Evidence:	Self-Rating:
• Yes • No		0 1 2 3 4

Culturally Responsive Pedagogy: an educator’s ability to recognize students’ cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content in order to promote effective information processing. All the while, the educator understands the importance of being in relationship and having a social-emotional connection to the students in order to create a safe space for learning (Hammond, 2015).

Focuses on improving the learning capacity of diverse students who have been marginalized educationally		
Present: • Yes • No	Evidence:	Rating: 0 1 2 3 4
Centers around the affective and cognitive aspects of teaching and learning		
Present: • Yes • No	Evidence:	Rating: 0 1 2 3 4
Concerns itself with building resilience and academic mindset by pushing back on dominant narratives about people of color		
Present: • Yes • No	Evidence:	Rating: 0 1 2 3 4

What else did you observe while watching your classroom observation?

What new questions have emerged for you?

Appendix E: 3M Reflective-Action Protocol

Chapter Check-In: #_____

mindset | 'mīn(d)set| **noun** [*usually in singular*] the established set of attitudes held by someone

What did you learn that confirmed what you already knew or believed about teaching culturally and linguistically diverse students?
--

What did you learn that challenged what you already knew or believed about teaching culturally and linguistically diverse students?

In what ways, if any, did your mindset shift related to teaching culturally and linguistically diverse students?
--

move |moov| **verb** 3 [*no object*] make progress; develop in a particular manner or direction

What “teacher move” are you committed to trying after reading this chapter?

What will you try?	How will you do it?	By when will you do it?
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mus^uing |'myooziNG| noun (usually musings) a period of reflection or thought

Take a moment to reflect on the outcome of your “teaching move”. What were you able to implement? With who? How did it go? What did you learn?
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