St. John's University St. John's Scholar

Theses and Dissertations

2020

Equity-Minded Teacher Preparation in the California Community College

Jesus Miranda Saint John's University, Jamaica New York

Follow this and additional works at: https://scholar.stjohns.edu/theses_dissertations

Part of the Educational Leadership Commons

Recommended Citation

Miranda, Jesus, "Equity-Minded Teacher Preparation in the California Community College" (2020). Theses and Dissertations. 176.

https://scholar.stjohns.edu/theses_dissertations/176

This Dissertation is brought to you for free and open access by St. John's Scholar. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of St. John's Scholar. For more information, please contact fazzinol@stjohns.edu.

EXAMINING EQUITY-MINDED TEACHER PREPARATION IN THE CALIFORNIA COMMUNITY COLLEGE

A dissertation submitted in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

to the faculty of the

DEPARTMENT OF EDUCATION SPECIALTIES

of

THE SCHOOL OF EDUCATION

at

ST. JOHN'S UNIVERSITY New York

by

Jesus Miranda

Date Submitted: October 27, 2020

Date Approved: January 29, 2021

Jesus Miranda

Dr. Aly McDowell

© Copyright by Jesus Miranda 2020 All Rights Reserved

ABSTRACT

EXAMINING EQUITY-MINDED TEACHER PREPARATION IN THE CALIFORNIA COMMUNITY COLLEGE

Jesus Miranda

California Community Colleges (CCC) is the largest and most diverse system of higher education in the United States. It serves 2.1 million students, 54% of whom are from historically racially marginalized communities in the United States (California Community College Chancellor's Offices, 2020). As with all higher education settings in this country, such diversity results in large racial disparities in classroom outcomes. While the classroom remains the primary point of contact for students, CCC instruction is vastly underresearched, with existing research tending to focus on issues outside the classroom (Zapata, 2019). In an effort to identify an effective method to support the elimination of racial disparities in classroom outcomes, this study utilized a critical race theory (CRT) lens (Ledesma & Calderón, 2015) to implement a mixed-methods explanatory sequential design to examine teacher preparation in a program of professional development, the Equity-Minded Teaching and Learning Institute (EMTLI). This year-long program introduces changes to pedagogy and teaching practices using course-level racially disaggregated data. It uses equity-minded teaching and learning methods stemming from CRT to train multidisciplinary faculty in addressing racial disparities in classroom outcomes for students from historically racially marginalized communities.

This study examined the influence of voluntary participation in two EMTLI programs, spring/fall 2019 and fall/spring 2019–2020, for 32 multidisciplinary faculty. The purpose was to measure any shifts to improved pedagogical and teaching practices and their own perceptions of students from historically racially marginalized communities. Previously administered EMTLI survey data were collected and examined for pre and post pedagogical and teaching practices. Semi-structured interviews informed by the survey data were carried out to better gauge changes to pedagogy, teaching practices, perceptions of students from historically racially marginalized communities, and overall program effectiveness. The outcomes of this study show participants believe EMTLI is an effective program of professional development. It supports eliminating course-level racial equity gaps because it had a significant impact on participant changes to faculty practices, policies, and perceptions of students from historically racially marginalized marginalized communities.

DEDICATION

This was only possible due to the love and emotional support I received daily from my wife (Angelina Rosie) during this process and in general since we met. You make me a better person and always find a way to help me connect with the world better. I love you so much, Beautiful! To my newborn daughter (Lina Yareni): Thank you for being the best motivating factor to help me get through this. I hope I can be as awesome a parent as your grandparents were to me. Apá (Artemio) y Ama (Agueda), I would never have achieved anything—let alone a doctorate—without your support, and you never gave up on me despite all the havoc, craziness, and stress I put you two through. Gracias por ser los mejores padres para mí y los quiero mucho! I love you Eduardo, Paola, Isaias, Moises, Maverick y Cruz: Thank you for being great nephews and niece. I wish you the best in your adventures and please know you will always have me to support you. Older sister (Dulce Maria), even though we see the world completely differently and function in that manner, I love you. Thank you for being a great big sister when I was a child; I will never forget that. Additionally, I can't forget about my Homies for Life, who saved my life so many times over and over in the midst of our joint craziness. I always felt accepted and understood, but you also held me accountable to us, and I can't thank you enough for that John, Fernando, Daniel, Rudy, Joe, Adrian, Eliseo, Morga, Jorge, Varela, Brent, and Luis. Also, thank you to the Ocean Beach and San Diego crew-Eloy, Cruz, Oz, Art, Andre, Luis, and Joseph-for all the stupid adventures and the love. Last but not least, a big thank you to the LA homies --- Nelson and Javier--- for being solid standup vatos.

ACKNOWLEDGEMENTS

Huge kudos to the IESE crew, specifically Moriah Gonzalez-Meeks and Katie Cabral, for being the best sidekicks in this process of making EMTLI come to life. I can't thank you enough for the countless hours discussing about what we want to do, why, and how we will make it happen. Also, a big thank you to Brianna Hays and Dr. Julianna Barnes for being supportive and allowing me the space to focus on this work. Gracias to Dr. Star Lacey-Rivera, Dr. Art Guaracha, and Sra. Alicia Muñoz for taking the time in your busy schedules to proofread and provide me much needed feedback and guidance early in my dissertation process. Lastly, thank you to my dissertation chair Dr. Aly McDowell, and also Dr. Michael Sampson, for making this process such a supportive endeavor.

Dedication	ii
Acknowledgements	iii
List of Tables	viii
List of Figures	ix
CHAPTER 1: INTRODUCTION	1
Statement of the Problem	2
Purpose of the Study	
Significance of the Study	
Literacy Perspective	7
Theoretical Framework	
Critical Race Theory within Education	
Critical Race Theory Tenets	14
Subtheories of CRT	
Criticism of CRT	20
Application to the Research Study	20
Equity-Minded Teaching and Learning Institute	21
Research Questions	
Definition of Terms	
CHAPTER 2: REVIEW OF RELATED RESEARCH	30
Organization of the Literature Review	30
The California Community Colleges	
The California Master Plan	

TABLE OF CONTENTS

Intention and Outcomes	
The Academic Senate	38
Professional Development	
Statewide Faculty Demographics	
Statewide Racial Equity Gaps	47
Equity-Minded Teaching and Learning Approaches	
Culturally Relevant Pedagogy	53
Culturally Responsive Teaching	
Community Cultural Wealth	56
Shared Components	
Academic Skills and Concepts	60
Critical Reflection	62
Cultural Competence	
Critique of Discourse of Power	<u>65</u>
Chapter Summary	
CHAPTER 3: METHOD	
Research Questions	68
Context of Study	
Research Design	
Research Paradigm	72
Population and Sample	
Equity-Minded Teaching and Learning Institute	77
Conceptual Framework	

Data Collection and Analysis: Explanatory Sequential Design	
Phase 1: Quantitative Data Collection	
Phase 2: Qualitative Data Collection	
Presentation of Findings	
Ethical Considerations	90
Potential Research Bias	
CHAPTER 4: RESULTS	
Quantitative Survey Results	
Quantitative Descriptive Statistics	
Analysis of Quantitative Survey Results	
Cumulative Repeated-Measures/Within-Subjects Results	100
Informing the Qualitative Phase	
Additional Survey Data	
Qualitative Interview Results	
Analysis of Qualitative Interview Data	
Themes in Redefined Concept of Equity-minded	
Researcher Observations	
Qualitative Data Expanding on Quantitative Data	
CHAPTER 5: DISCUSSION	
Summary of Results	
Research Question 1	
Research Question 2	
Research Question 3	135

Relationship Between Results and Prior Research	136
Academic Skills and Concepts	137
Critical Reflection1	139
Cultural Competence	140
Critique of Discourse of Power1	141
Limitations1	143
Recommendations for Future Research	144
Recommendations for Future Practice	145
Conclusion1	145
REFERENCES1	148
Appendix A: St. John's University IRB Approval	156
Appendix B: Participant Recruitment Email	157
Appendix C: Faculty Participant Informed Consent Form	158
Appendix D: EMTLI Presurvey1	160
Appendix E: EMTLI Postsurvey1	161
Appendix F: Interview Questions	165
Appendix G: EMTLI Sessions and Teacher Learning Outcomes 1	167

LIST OF TABLES

Table 1: California Under 20 Population by Ethnicity (1970–2020)	35
Table 2: Enrollment in California Public Higher Education (1948–2005)	36
Table 3: CCC Student Demographics by Ethnicity (2017–2018)	38
Table 4: CCC Faculty Demographics by Ethnicity (Fall 2019)	46
Table 5: CCC Course Success, Retention, Math, English, and Transfer by Race	_ 50
Table 6: College-wide Racially Disaggregated Course Success Rates, Fall 2018	_ 75
Table 7: EMTLI Completers by Discipline Spring/Fall 2019 and Fall/Spring 2019-20	. 76
Table 8: Group Statistics	95
Table 9: Independent Sample Test	. 96
Table 10: Additional EMTLI Survey Data	102
Table 11: Expected Themes Emerging From Interviews	124

LIST OF FIGURES

Figure 1: Explanatory Sequential Design	71
Figure 2: Design Thinking for EMTLI	81
Figure 3: Process for Data Collection	87
Figure 4: Five-step Qualitative Data Analysis Process	88

CHAPTER 1: INTRODUCTION

California Community Colleges (CCC) is a publicly funded institution made up of 116 colleges. It is the largest and most diverse system of higher education in the United States. Its 2.1 million students are comprised as follows: 45% Latino or Mexican American, 6% Black or African American, 3% Filipino, 0.43% Native American, and 0.41% Pacific Islander (California Community Colleges Chancellor's Office [CCCCO], 2020). These historically racially marginalized populations have experienced longstanding underrepresentation, been underserved, and denied higher education opportunities because of race in the United States (Rivera-Lacey, 2016). CCC is no different. Inequitable classroom outcomes in course success, retention, and successful completion of transfer-level math and English have been long-standing and persistent for students from these communities who attend one of the 116 CCC colleges.

While the classroom remains the primary point of contact for students, instruction in the CCC is vastly underresearched. Existing research has focused on issues other than classroom instruction, such as access, engagement, support services, the structure of remedial education, and the students themselves (Zapata, 2019). This is not surprising in a highly politicized setting where the majority of faculty are White and govern over teaching and learning, professional development, and bargaining units. Effective research on how CCC instruction creates disparities in classroom outcomes for students from historically racially marginalized communities requires a central place for race, Whiteness, racism, and challenging the dominant perspective and longstanding systemic inequities within the CCC. These include the lack of diversity within instructional units, an ineffective system of professional development, outdated instruction focused on

creating a monocultural and monolingual society centered on White middle-class norms, and traditional Eurocentric education based on meritocracy and power (Paris, 2012).

Statement of the Problem

Despite the high level of diversity among the students it serves, the same cannot be said about the classroom faculty, as the dominant demographic group remains White: 59% of full-time faculty and 58% of part-time faculty (CCCCO, 2013). Unfortunately, if these numbers were disaggregated between student services (counselors) and instructional faculty, the classroom demographic percentages for White instructional faculty would be much higher in both the part-time and full-time ranks. Aside from the lack of diversity, most instructors have not been adequately prepared by their graduate programs to teach such a racially diverse student population (Bensimon & Gray, 2020). CCC faculty generally received graduate training through the same academy, which Paris (2012) pointed out has, in this country, been focused on creating a monocultural and monolingual society centered on White middle-class norms and traditional Eurocentric instruction based on meritocracy and power. Therefore, when they begin teaching, faculty will instinctively tend to replicate the color-blind, race-neutral, meritocratic learning environment they experienced themselves, regardless of their own racial background (Yosso et al., 2004). This replication of traditional curriculum, structures, and discourses continues the ongoing distortion, omission, and stereotyping of the experiences of students from historically racially marginalized communities, which serves to rationalize discriminatory curricular processes that maintain structures of racial, gender, and class inequality in schools (Yosso, 2002).

In addition, with CCC instructional units governing student learning and faculty professional development and influential bargaining units, improvement to teaching practice is a completely personal choice. The current CCC system of professional development is completely reliant on both faculty self-motivation and professional development activities that may interest them. Therefore, this model simply lacks the strength to incentivize professional growth or a focus on research-based strategies for improvement. There is no mechanism or mandate in place to require or motivate faculty to engage in effective teaching and learning strategies that address existing racial disparities identified in their practice; the lack of diversity in the instructional ranks; the academy's color-blind, race-neutral, meritocratic teaching; the effects of Whiteness; structural inequalities; and institutionalized racism. This has led to persistent racial disparities in classroom outcomes for students from historically racially marginalized communities attending the CCC.

Purpose of the Study

With the CCC system serving over a million students from historically racially marginalized communities, chronic racial disparities in classroom outcomes at all 116 colleges within the CCC, and the classroom being the primary point of contact for students, this study was an effort to eliminate classroom racial disparities for such students. It uses a critical race theory (CRT) lens to implement a mixed-methods explanatory sequential design to examine teacher preparation in a program of professional development, the Equity-Minded Teaching and Learning Institute (EMTLI). The EMTLI introduces changes to pedagogy and teaching practices using racially disaggregated data. It uses equity-minded teaching and learning methods stemming from

CRT to train multidisciplinary faculty in the elimination of racial disparities in classroom outcomes for students from historically racially marginalized communities. This study examined 32 multidisciplinary full- and part-time faculty who voluntarily participated in one of two year-long EMTLI programs held during the spring/fall 2019 and fall/spring 2019–2020 at a CCC located in San Diego County, California. It identified whether their participation led to any changes in their pedagogical and teaching practices or their perceptions of students from historically racially marginalized communities. Previously developed and administered EMTLI survey data were collected from the Office of Institutional Effectiveness, Success, and Equity (IESE) to examine pre and post teaching practices. Interviews were then conducted to add to the survey data, gauge changes in participant perceptions of students from historically racially marginalized communities and identify whether EMTLI was an effective program of professional development.

This study was guided by CRT to ensure a centrality on race, Whiteness, and racism, as well as to interrogate the dominant perspective and longstanding systemic inequities within the CCC to eliminate chronic racial disparities for its students from historically racially marginalized communities. It also helped further the literature by providing a concrete example of CRT-driven equity-minded teaching and learning methods in the CCC. These equity-minded teaching and learning methods stem from CRT and are a synthesis of culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002), and the community cultural wealth model (Yosso, 2005). These CRT approaches were selected based on the literature and their focus areas being teaching pedagogy, teaching practice and teacher perception of students from historically racially marginalized communities.

Significance of the Study

Existing research is insufficient in terms of examining how the teaching that occurs in CCC classrooms directly results in racial disparities for students from historically racially marginalized communities. The existing literature focused on the CCC mostly centers on issues outside of classroom instruction, such as student access, engagement, support services, and remedial education. These are important factors, but the classroom remains the primary point of contact for students and the epicenter for racial disparities. As Zapata (2019) highlighted in her work examining teaching and learning in the CCC, there is a lack of literature investigating the CCC classroom. Also, the existing literature often adopts a perspective on students from historically racially marginalized communities that labels them as a problem that needs fixing. Bensimon and Gray (2020) pointed out that this perspective is pervasive in the CCC and other higher education settings because it helps faculty avoid any responsibility for student outcomes by placing the blame on the students themselves. It retraumatizes them as it gives credence to the false narrative of being unprepared or underprepared and unable to manage their own lives.

Howard and Navarro (2016) shared that scholars have a difficult time fully understanding how to translate CRT into research, theory, and practice in order to achieve educational equity. Thus, there are few concrete examples of how to use it in educational practice. Aside from a lack of understanding of CRT in practice, the lack of literature also leads to argument from academic advocates for color-blind or race-neutral policies, who firmly believe a recognition of race only perpetuates racial antagonism and racism (Powers, 2007). With Whites being a majority of practitioners in all academic

spaces, race-neutral or color-blind policies remain intact, along with arguments against the focus on race to eliminate racial disparities in education. This further highlights the importance of this study. Little existing literature on CRT pedagogies focuses on teacher preparation for teaching and learning practices in the CCC classroom to address racial disparities for students from historically racially marginalized communities. Most CRTbased literature on education tends to focus on either K-12 or the university level, which omits the critical issues facing the CCC's efforts to eliminate racial disparities in the classroom for students from historically racially marginalized communities.

Therefore, this study serves as a baseline in the literature on equity-minded teaching and learning approaches in the CCC stemming from CRT. These drive a program of professional development for teacher preparation in eliminating racial disparities in classroom outcomes for students from historically racially marginalized communities who attend California's 116 community colleges. This study also adds a focus on the CCC to existing literature on critical race theory and CRT-based methods such as culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002), and the community cultural wealth model (Yosso, 2005). It also adds to previous literature focused on the CCC, as it aligns and adds to the approach proposed by Bensimon (2018), which also derives from CRT. The need for equity was first adopted by the CCC in 1992, but it has yet to implement effective practices in the area of teacher preparation.

At the micro level, this study also adds to the ongoing discussions on the importance of professional development focusing on race, Whiteness, and meritocracy that uses racially disaggregated classroom data in efforts to improve instruction and thus

eliminate racial disparities in classroom outcomes. It also highlights the need to shift the responsibility for addressing racial disparities in classroom outcomes for students from historically racially marginalized populations to the instructional units and away from the students or student support services. Additionally, it informs practitioners such as faculty and administrators about equity-minded approaches to classroom instruction and a process to implement programmatic professional development for faculty that is focused on eliminating disparities in classroom outcomes for historically racially marginalized populations through equity-minded teaching and learning methods in the CCC.

At the macro level, there are significant implications for statewide policies governing student equity initiatives and their funding, because current and previous efforts continue to fail to address disparities in classroom outcomes for historically racially marginalized populations. As this study highlights, there must be an intentional focus on race, Whiteness, and meritocracy—in approach and method—to effectively address classroom disparities for CCC students from historically racially marginalized populations. It also provides a template by which any CCC could move forward with their own EMTLI effort. In addition, it could foster initial conversations on the need to change the current system of professional development for faculty in the CCC. All these implications could be extremely important for driving change at all levels, because there has yet to be a process or method proven to eliminate disparities in classroom outcomes for students from historically racially marginalized

Literacy Perspective

The intersection between literacy and the focus of this study, EMTLI and improving CCC classroom outcomes for students from historically racially marginalized

communities, is my own personal journey that informed my perspective on literacy. This begins by acknowledging the prominent influence Paulo Freire (2018) and Donaldo Macedo (2006) had on my conceptual understanding of literacy as a means of power and how throughout history it has been used as a tool of oppression or liberation for people of color. While there have been many efforts to improve literacy education since the publishing of Freire's *Pedagogy of the Oppressed* in 1970 and later Macedo's *Literacies of Power* in 1994, racial disparities in literacy education persist. This tool of oppression is still being wielded at historically racially marginalized communities in all levels of literacy education in the United States. As such, I am motivated by a deep desire to support the liberation of students who come from historically racially oppressed communities, such as myself.

While poverty, immigration status, and racism were always at the forefront of my existence as a child, I was still extremely fortunate. I had both of my parents, and my Spanish-literate mother was effective in teaching me literacy skills in Spanish. While she could not do the same in English, that did not stop her from leveraging her Catholic network and her willingness to volunteer to gain me entrance to Head Start a full year before I was eligible. Having 2 years of programmed literacy skill development in English, plus home literacy development in Spanish, all before starting Kindergarten, prepared me to not only succeed but also to enjoy and normalize the act of reading and writing both in and out of school. Without a doubt, my preparation in dual language literacy changed the trajectory of my life. I am sure of this despite being systemically racially marginalized by the schools, police, and the courts. I sabotaged my own life and academics to meet the societal expectations of me as a first-generation Mexican

American male in this country, which had me convinced I was not intelligent or deserving enough to succeed.

As for my understanding and definition of literacy, the most influential theoretical approach was the work of Louise Rosenblatt and her transactional theory on literacy development. After being introduced to Rosenblatt in the Foundations of Literacy Inquiry and Professionalism (EDU 3281) course, and reading more on her transactional theory, I quickly realized it described my past and present experiences with literacy and also aligned with the ideas of the EMTLI at the center of this study. This realization was both exciting and comforting because it provided me an actual lens to view and understand my life with literacy and how EMTLI intersects with literacy. Gaining this insight about literacy and transactional theory was partly based on when it occurred. This reminded me of reading Mary Shelley's *Frankenstein* as a 16-year old in continuation (alternative) high school. At the time, that was an emotional and powerful reading for me; in thinking about my life at that moment, I was my own version of Frankenstein. I did not have the ability to verbalize what I felt, so I felt like a monster: out of place, forced to leave my high school due to academic and conduct issues; not sure who I was or was supposed to be; felt dumb, physically ugly, and insecure; and as a result, was just numbing myself pretty much daily with either alcohol, weed, or crystal meth. Yet, reading Frankenstein at that point in time resonated with me. The transaction was therapeutic, validating, and a much-needed escape from my reality.

About 6 years later, I decided to once again read *Frankenstein* while I had some down time from working on my undergraduate degree at the University of California, Riverside. This was a completely different transaction, as I could not relate to the text in

the same way I once did. This made sense, of course, because my life and I were completely different. I had plenty of required literature to read focusing on aspects of Latin America, which I also deeply enjoyed reading because I could personally relate and connect with it all. So, with topics such as immigration, fiction and nonfiction work, proletarian revolutions, U.S. foreign policy, political regimes, economics, globalization, and the history of the region, rereading Shelley's work was nothing like the magnitude of the transaction that had occurred between us when I was 16 years old.

Therefore, due to my own experiences with literacy, my definition of it aligns with Rosenblatt's transactional theory. I define literacy as an act of exploration where a reader or writer has an active role in exchanging meaning with the text being digested or produced based on their past aesthetic experiences, racial and or cultural lens, and present reality during the exchange (Roen & Karolides, 2005). While my personal definition is more inclusive of literacy as a whole, it remains in line with her transactional theory. The central idea is that literacy development is not stagnant, which is to say it does not just happen to the individual. On the contrary, the individual plays an active role via a transaction occurring with the text (Connell, 2001). In addition, all text regardless of modality (booklet, reader, book, e-book, novel, or poem) are only ink spots on a piece of paper or pixels on a screen until the reader does the work of transforming them into a set of meaningful symbols based on what they are living through at that point in time and their past aesthetic experiences (Roen & Karolides, 2005). I must also echo Rosenblatt's notion that a classroom experience inspired by the transactional approach would lead students to better develop how to think rationally within an emotionally colored context. It leads to a synthesis and reflection that connects to the learning process, linking interest,

emotions, and imaginations with intellect and ensuring a fruitful transaction between the reader and the text (Connell, 2001).

The topic of this study—EMTLI and improving CCC classroom outcomes for students from historically racially marginalized communities—is connected to this definition of literacy. This study focused on training multidisciplinary classroom faculty to implement equity-minded content-based literacy practices in the CCC to eliminate inequities in classroom outcomes for students from historically racially marginalized communities. In other words: training faculty to gain an understanding of the cultural transaction occurring in the classroom between the students, the instructor, and the curriculum. Its intent is to have faculty use the students' community cultural wealth and contextualizing content to teach through instead of at students from historically racially marginalized communities. Hence, while this study is centered on identifying an effective vehicle of professional development to best prepare classroom faculty to eliminate course-level racial inequities, it is also about improving content-based literacy practice. This study approaches the topic of literacy improvement using different terms and approaches focused on improving instruction and teacher preparation because its setting is the CCC classroom. With no stand-alone literacy component in the CCC, it is intertwined in every classroom regardless of content area.

Thus, the year-long program of professional development examined in this study, the EMTLI, is the proposed vehicle to influence changes in pedagogy, practice, and perspectives on students from historically racially marginalized communities for multidisciplinary faculty in their content-based literacy practices and thus improve CCC classroom outcomes for students from historically racially marginalized communities. It

is grounded on the three CRT approaches driving EMTLI: culturally relevant pedagogy, culturally responsive teaching, and the community cultural wealth model.

Theoretical Framework

This study is centered around improvements to classroom outcomes for students from historically racially marginalized communities attending the CCC. Thus the theoretical framework guiding all aspects of this study is CRT as it pertains to education. Race, culture, society, history, and power are all variables that must be taken into consideration in any efforts to remediate the historical racial marginalization for students from communities of color. As Ladson-Billings and Tate (2000) pointed out, any discussion on social justice and school inequities must include the following central propositions: (a) race continues to be a significant factor in determining inequity in the United States, (b) U.S. society is based on property rights, and (c) the intersection of race and property creates an analytic tool through which we can understand social (and, consequently, school) inequity. This use of CRT aligns with the focus of this study: to examine a program of professional development for classroom faculty that introduces changes to pedagogy and teaching practices using racially disaggregated data with equity-minded teaching and learning methods stemming from CRT. Its purpose is to improve teaching and learning of content-based instruction to address the racial disparities in classroom outcomes for CCC students from historically racially marginalized communities. Therefore, CRT is the framework or lens used across all sections of this study to analyze and discuss the purpose, setting, problem, literature, method, outcomes, and discussion.

Critical race theory emerged from the critical legal studies (CLS) movement of the 1980s, which was conceived in opposition to traditional legal scholars' discourse. While CLS held race as a social construct, it did not account for the racial realities of Black people in the United States (Closson, 2010). This motivated a break away from CLS by a group of legal scholars of color who desired a discourse that could provide a race-based systematic critique of the traditional legal system (Powers, 2007). The father of CRT is recognized as Derrick Bell, who had been working on the concept of CRT since the mid-1970s (Ladson-Billings, 1998).

Bell proposed that Black people were living in an American society where liberalism was a façade and racial inequities would never be rectified; they would be addressed only to the extent that White people felt threatened by the status quo (Closson, 2010). Bell's beginnings of CRT were influenced by activism and counter-storytelling. While it focused on a critique of civil rights legislation, literature on critical pedagogy, ethnic studies, multicultural education, and women's studies would soon take CRT beyond the Black and White binary that dominated the discourse at the onset (Yosso et al., 2004). In 1995, Gloria Ladson-Billings and William Tate incorporated the work of pioneers W.E.B. DuBois and Carter G. Woodson along with contemporary scholars James Banks, Christine Sleeter, Carl Grant, Geneva Gay, and Carlos Cortez in examining race and educational opportunities to help introduce CRT to the field of education (Howard & Navarro, 2016).

Critical Race Theory Within Education

To further explain how CRT functions in education, we turn to research by Howard and Navarro (2016), who reflected on and summarized 20 years of effort and

progress of CRT within the educational setting. This research provides the field with a definitive explanation of how CRT serves as a framework to examine issues of racism and educational inequities. This includes intersectionality with other forms of oppression—such as sexism, classism, homophobia, and nativism—and challenging and dismantling prevailing notions of fairness, meritocracy, color blindness, and neutrality (Howard & Navarro, 2016).

Critical Race Theory Tenets

To arrive at a clear definition of the CRT framework, Ledesma and Calderón (2015) and Howard and Navarro (2016) identified the five tenets to guide any research and inquiry on educational equity and racial justice. These were developed as a result of the work of many past and current CRT scholars: (a) centrality of race and racism, as all CRT research within education must centralize race and racism, including intersections with other forms of subordination such as gender, class, and citizenship; (b) challenging the dominant perspective, as CRT research works to challenge dominant narratives and recenter marginalized perspectives; (c) commitment to social justice, as CRT research must always be motivated by a social justice agenda; (d) valuing experiential knowledge, as CRT builds on the oral traditions of many Indigenous communities of color around the world and centers the narratives of people of color when attempting to understand social inequality; and (e) being interdisciplinary, as CRT scholars believe that the world is multidimensional and research about the world should reflect multiple perspectives.

Additionally, a CRT framework naturally challenges academic practitioners to expose and change the racial, gender, and class inequalities created and maintained by traditional curriculum (Yosso, 2002). It also highlights the relative invisibility of scholars

of color in the ongoing debate over whose actual knowledge counts in academia (Ledesma & Calderón, 2015). To further assist CRT scholars in disrupting academic prose in higher education, Patton (2016) identified three additional propositions to inform educational inequity in postsecondary contexts and the embedded complexities of racism and White supremacy: (a) the establishment of U.S. higher education is deeply rooted in racism and White supremacy, the vestiges of which remain palpable; (b) the functioning of U.S. higher education is intricately linked to imperialist and capitalist efforts that fuel the intersections of race, property, and oppression; and (c) U.S. higher education institutions serve as venues through which formal knowledge production rooted in racism and White supremacy is generated.

Subtheories of CRT

Over time CRT has branched out into many subtheories, such as Latino/a critical race theory, tribal critical race theory, feminist critical race theory, and Asian critical race theory. This addressed a desire to better incorporate the racialized experiences of other marginalized groups, such as women, Latinos/as, Native Americans, and Asian Americans. CRT provided these groups a framework for interrogating racism, classism, and other forms of oppression beyond the historic Black and White binary (Yosso, 2005). Another extension of CRT, though not always acknowledged as such, is the equity-mindedness concept from the Center for Urban Education (CUE) at the University of Southern California. Equity-mindedness is focused on dismantling racial inequities in higher education. Despite the lack of acknowledgement it receives from CRT, its undeniable conceptual extensions are highly visible.

The term *equity-minded* as used by the EMTLI derives from the work of Estela Mara Bensimon (2018), who furthered the notion that equity-mindedness in theory and practice is at the core of implementing student equity in education. In her foundational work as director of the CUE, Bensimon (2018) conceptualized that both equity and equity-mindedness must accept Whiteness—not the achievement gap—as the reason behind the creation and sustaining of racial inequality in higher education. Therefore, any authentic implementation of equity and equity-mindedness requires intentional focus on structural inequality and institutionalized racism with responses resulting in systemic changes. Additionally, CUE (2019) defined racial equity as a two-dimensional concept: one is institutional accountability demonstrated by racial parity in student outcomes, and the other is a critical understanding of the commonality of Whiteness at the institutional and practice levels. The CRT-driven teaching and learning that is at the center of the EMTLI training was called equity-minded because of the alignment of Bensimon's (2018) concept of equity-mindedness with CUE's definition of racial equity with CRT in education. The use of equity-minded language in this study is also important because the CCC adopted the term equity, and later equity-mindedness, and looked to the work of Bensimon and CUE to help it redefine the work of addressing the persistent racial achievement gaps being created in the CCC.

Unfortunately, most CCC practitioners are White or practitioners of color implement color-blind, race-neutral approaches. This has resulted in student equity efforts to develop critical race consciousness within practitioners being mostly in name and not in practice (Bensimon & Gray, 2020). It could be said it was taken as idealistic, as just another of the many initiatives pushed down to the 116 colleges from the CCC

Chancellor's Office and nothing more. Therefore, you will find terms of equity and equity-mindedness embedded in the student equity plans, college mission and vision statements, and notices plastered all over different areas of all CCC's. In reality—aside from what has been in place via categorical programs such as Extended Opportunity Programs and Services, Disabled Student Programs and Services, Puente, and UMOJA little is actually being implemented or changed to further the equity and equity-minded work as proposed by Bensimon and CUE.

This equity work in the CCC has its origins in 1992, but it was sporadic and unfunded. It would not be until 2012 that state legislation required each college to create and maintain a student equity plan that was now tied to an equity budget. This legislation stated the following (California Legislative Information [CLI], 1997):

a) In order to promote student success for all students, regardless of race, gender, age, disability, or economic circumstances, the governing board of each community college district shall maintain a student equity plan which includes for each college in the district: (1) Campus-based research as to the extent of student equity in the five areas described in paragraph (2) and the determination of what activities are most likely to be effective; (2) Goals for access, retention, degree and certificate completion, ESL and basic skills completion, and transfer; for the overall student population and for each population group of students, as appropriate. Where significant underrepresentation is found to exist in accordance with standards adopted by the Board of Governors, the plan shall include race-neutral and/or gender-neutral measures for addressing disparities in those areas, and, when legally appropriate, goals for addressing a disparity in representation of

students with disabilities, and where required by federal law, race-conscious and/or gender-conscious measures for addressing a race or gender disparity; (3) Implementation activities designed to attain the goals, including a means of coordinating existing student equity related programs; (4) Sources of funds for the activities in the plan; (5) Schedule and process for evaluation; and (6) An executive summary that includes, at a minimum, the groups for whom goals have been set, the goals, the initiatives that the college or district will undertake to achieve these goals, the resources that have been budgeted for that purpose, and the district official to contact for further information.

(b) These plans should be developed with the active involvement of all groups on campus as required by law, and with the involvement of appropriate people from the community.

(c) The Board-adopted plan shall be submitted to the Office of the Chancellor, which shall publish all executive summaries, sending copies to every college and district, the chair of each consultation group that so requests, and such additional individuals and organizations as deemed appropriate.

(d) For the purposes of this section, "each population group of students" means American Indians or Alaskan natives, Asians or Pacific Islanders, Blacks, Hispanics, Whites, men, women, and persons with disabilities. A person shall be included in the group with which he or she identifies as his or her group.

Studies Utilizing CRT

This study not only employs a CRT framework, but it also revolves around the vast amount of literature that is either directly guided by a CRT framework or stems from

a CRT-driven approach. This is the case with the three approaches used in the program of professional development at the center of this study. Both culturally responsive teaching and culturally relevant pedagogy are models stemming directly from CRT. The literature used in this study from Ladson-Billings and Gay is linked to CRT. Additionally, Tara Yosso (2005) conceptualized her community cultural wealth model as a CRT challenge to traditional interpretations of cultural capital. CRT shifts the research lens away from a deficit view of communities of color as places full of cultural poverty disadvantages, and instead focuses on and learns from the array of cultural knowledge, skills, abilities, and contacts possessed by socially marginalized groups that often go unrecognized and unacknowledged.

Aside from the EMTLI's foundation in culturally responsive teaching, culturally relevant pedagogy, and the community cultural wealth model, additional research revolving around CRT is used in this study. One example is Sleeter (2017), who employed tenets of CRT to critique the common pattern in teacher education of focusing on preparing predominantly White cohorts of teacher candidates for racially and ethnically diverse students. Patton (2016 focused on the role CRT can play in disrupting postsecondary prose, or the ordinary, predictable, and taken-for-granted ways in which the academy has functioned for centuries as a bastion of racism and White supremacy. Martin (2014) explored the impact of reading *Huckleberry Finn* through the lens of CRT on both teacher and students in a racially diverse urban high school environment. Closson (2010) attempted to understand CRT as it had been applied in related fields such as higher education and possible reasons for its limited application in adult education theorizing about race and racism. CRT tenets were discussed using examples that

demonstrated how CRT reveals areas of racism left untouched by other forms of theorizing. Solorzano and Yosso (2002) addressed how CRT can inform a critical race methodology in education, challenging the intercentricity of racism with other forms of subordination and exposing deficit-informed research that silences and distorts epistemologies of people of color.

Criticism of CRT

Howard and Navarro (2016) highlighted criticisms of CRT, which consist of scholars not fully understanding how CRT translates into research, theory, and practice in order to achieve educational equity. Hence, there are few concrete examples of how to implement it in higher educational practice. Aside from a general lack of understanding of CRT in practice, further criticism derives from the academic advocates of color-blind or race-neutral policies. Such critics continue to firmly argue that recognizing race in academia only perpetuates racial antagonism and racism (Powers, 2007). This argument tends to be the norm because most practitioners in all academic spaces are White; thus, it is easy for this narrative to function as a reality. Therefore, race-neutral and color-blind policies remain intact, along with arguments against focusing on race to eliminate racial disparities in education.

Application to the Research Study

This criticism and opposition only highlights the importance of CRT as the framework guiding this study. Given the aforementioned tenets, propositions, and guiding principles that comprise CRT in education, and in consideration of the study topic, it could be argued there is no theory in educational research that could more fully and holistically address the racial disparities in classroom outcomes in higher educational

systems, such as the CCC, that stem from the history of Whiteness, institutional racism, and meritocracy in this country. In order to effectively address such issues, educators must get to its core, which would require having guiding tenets that are primarily focused on the centrality of race and racism, challenge the dominant perspective, are committed to social justice, value experiential knowledge, and are interdisciplinary. All of these are in place for CRT. It is also the foundational theory behind the equity-minded teaching and learning methods employed by the program of professional development at the center of this study, the EMTLI.

Equity-Minded Teaching and Learning Institute

This study took place at a CCC in San Diego County, California. It examined a program of professional development, the EMTLI. The EMTLI is a CRT-driven yearlong program of professional development for CCC instructional faculty. Its purpose is to help faculty implement changes to their pedagogy and teaching practices via equityminded teaching and learning methods in order to eliminate course-level racial achievement gaps for students from historically racially marginalized communities. These equity-minded teaching and learning methods directly derive from culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002) and the community cultural wealth model (Yosso, 2005). All of these are CRT-driven models. Despite the first two being mostly focused on K-12 education, all were identified as effective practices to adapt to the CCC setting.

The equity-minded teaching and learning approach developed and implemented at this CCC via EMTLI is the selected topic for this study; it is discussed further in this section. Equity-minded teaching and learning cannot be defined by one specific teaching

theory or approach; rather, it is a sum of the approaches found within culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002), and the community cultural wealth model (Yosso, 2005). These are the foundational approaches derived from CRT in education, and they make up the equity-minded teaching and learning approach in the EMTLI. They are integrated to prepare participants on topics such as redistributing cultural capital, shifting the classroom power dynamic, practitioner's awareness of the impact of their own race along with the race of their students, and acknowledging the social and historical context of race in higher education and the impact of race on educational opportunities in the United States.

To further explain how these CRT approaches are aligned and integrated to create equity-minded teaching and learning for the EMTLI program, Aronson and Laughter (2016) synthesized culturally relevant pedagogy (Ladson-Billings, 1995) and culturally responsive teaching (Gay, 2002). They identified four core components found in both CRT approaches: (a) academic skills and concepts, (b) critical reflections, (3) cultural competence, and (4) critique of discourses of power (Aronson & Laughter, 2016). While these four components derive from a focus on K-12 education, Yosso (2005) focused her community cultural wealth model on higher education. All of these form the framework used for equity-minded teaching and learning in the EMTLI. The addition of Yosso (2005) is critical to this effort because her initial focus was the higher education setting. Therefore, while it complimented the Aronson and Laughter (2016) synthesis of culturally relevant pedagogy (Ladson-Billings, 1995) and culturally responsive teaching (Gay, 2002), it also supported a transition to higher education, specifically the CCC. This is mostly because of the natural alignment of the Yosso model with both Gay and

Ladson-Billings as a counter to the traditional student deficit-based approach. Also, her critique of meritocracy permits a broader examination of the systemic issues it causes (Ladson-Billings, 1995; Gay, 2002 Yosso, 2005).

This strand of educational research deriving from CRT in education originated with school desegregation in the 1960s and 1970s in the United States. It has resulted in the two primary strands focused on K-12 education coming from Ladson-Billings and Gay (Aronson & Laughter, 2016). Gay focused on teaching and primarily sought to influence competency and methods, describing what a teacher should do in the classroom to be culturally responsive, while Ladson-Billings focused on pedagogy and primarily sought to influence attitudes and academic skills and concepts dispositions, describing a posture a teacher might adopt that, when fully embodied, would determine planning, instruction, and assessment (Aronson & Laughter, 2016).

Incorporation of these in equity-minded teaching and learning fosters a more holistic classroom approach, because they focus on separate but complementary types of outcomes. Teaching affects competence and practice, while pedagogy affects attitude and disposition. The last piece of the equity-minded teaching and learning puzzle arrives via Yosso (2005), who conceptualized that all forms of capital can be used to empower individuals. She designed her community cultural wealth model to capture the talents, strengths and experiences that students from communities of color bring with them to the college environment. All three CRT scholars, Ladson-Billings, Gay, and Yosso, present approaches that are undergirded by a firm commitment to social justice education and see the classroom as a site for social change. This supports the concept of equity-minded

teaching and learning. Once shifted from K-12 to higher education, specifically the CCC, they drive the EMTLI program's goals.

Research Questions

At the center of this study is the EMTLI, a program of professional development implemented at a CCC campus in San Diego County. This year-long program of professional development for instructional faculty introduced changes to pedagogy and teaching practices using racially disaggregated data and equity-minded teaching and learning methods stemming from CRT. It focused on eliminating racial disparities in classroom outcomes for students from historically racially marginalized communities. To examine the effectiveness of EMTLI, this study was guided by the following research questions:

- 1. Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute?
- 2. Do faculty demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute?
- 3. Do faculty who participated in a year-long Equity-Minded Teaching and Learning Institute find it to be an effective program of professional development for addressing course-level racial equity gaps?

Definition of Terms

academic senate: the formal governing body for faculty at each CCC that maintains all 10 + 1 efforts within the college.

California Community Colleges: the open access public system of higher education in California, with 116 colleges spread throughout the state.

classroom faculty: This term is used to describe the faculty who teach college courses, including student services faculty who teach classes in athletics, counseling or personal development, and student support for disabled student programs and services.

classroom outcomes: student results occurring in the classroom, such as course retention and course success.

community cultural wealth: Yosso (2005) conceptualized that all forms of capital can be used to empower individuals. Therefore, she designed her community cultural wealth model to capture the talents, strengths, and experiences that students from communities of color bring to the college environment. Additionally, she defined community cultural wealth as an array of knowledge, skills, abilities, and contacts possessed and utilized by communities of color to survive and resist macro and microforms of oppression (Yosso, 2005).

culturally relevant pedagogy: Ladson-Billings developed this concept, which requires instructors to set high expectations and emphasize academic success for all, foster cultural competence and the formation of a positive cultural identity, teach critical consciousness, and develop a critical consciousness to critique or interrupt current and historical social inequities (Ladson-Billings, 1995; Morrison et al., 2008). What this entails is for educators to make a conceptual shift and purposely focus on the value of acknowledging, validating, and reinforcing who students are (cultural competence) and what they are capable of (high expectations), and also incorporate the wealth of riches

they bring (critical consciousness) to the classroom as part of the curriculum (Ladson-Billings, 1995,1998, 2014, 2016, 2018).

culturally responsive teaching: Developed by Gay, this demands that practitioners approach students from an asset-based perspective instead of a deficit-based approach and then create changes on multiple levels, including instructional techniques, instructional materials, student-teacher relationships, classroom climate, and selfawareness to improve learning for students (Gay, 2002, 2010, 2013, 2018).

critical race theory: First developed by Bell, CRT in education has evolved and has the following tenets: (a) centrality of race and racism, as all CRT research within education must centralize race and racism, including intersections with other forms of subordination such as gender, class, and citizenship; (b) challenging the dominant perspective, as CRT research works to challenge dominant narratives and recenter marginalized perspectives; (c) commitment to social justice, as CRT research must always be motivated by a social justice agenda; and (d) valuing experiential knowledge, as CRT builds on the oral traditions of many indigenous communities of color around the world.

equity gaps: the term used in the CCC that replaced the achievement gap and refers to racial disparities in student outcomes.

equity and equity-mindedness: refers to terms acknowledging the acceptance of Whiteness, not the achievement gap, as the reason behind the creation and sustaining of racial inequality in higher education. Therefore, any authentic implementation of equity and equity-mindedness requires intentional focus on structural inequality and institutionalized racism, with responses resulting in systemic changes.

Equity-Minded Teaching and Learning Institute: a program of professional development for classroom faculty in the CCC.

faculty purview: refers to the set of 11 items (10 + 1) in education that state legislation has granted faculty ownership over in the CCC.

Hispanic-serving institution: an accredited, degree-granting, public or private nonprofit institution of higher education with 25% or more of its total full-time equivalent undergraduate enrollment comprised of Hispanic students.

instructional faculty: the CCC faculty who teach content area college courses and are in the instructional division. This excludes the student services faculty who teach classes in athletics, counseling or personal development, and student support for disabled student programs and services.

intersectionality: Crenshaw (2017) introduced the theory of intersectionality, which states the cumulative way in which the effects of multiple forms of discrimination (such as racism, sexism, and classism) combine, overlap, or intersect, especially in the experiences of marginalized individuals or groups

meritocracy: A system in which the talented are chosen and moved ahead on the basis of their individual achievement. It rewards personal effort, ability, and talent through competition to determine social and class standing.

open access: a higher education institution that anyone can register and attend, regardless of academic history or lack thereof.

racially marginalized students/communities: populations that historically have been underrepresented, underserved, and denied higher education opportunities because of race in the United States. In this study, it is used to indicate Black or African

American, Latino or Mexican American, Native American or Alaskan Native, Hawaiian or Pacific Islander, and Filipino communities.

student success: course success, retention, persistence, successful completion of transfer level math and English, and transfer rates to a postsecondary institution.

student services or nonclassroom faculty: CCC faculty who are in student services areas, including coaches, counselors, and student support specialists in areas such as disabled student programs and services.

teacher learning outcomes: the intended learning outcomes for faculty in each session of the EMTLI.

ten plus one (10+1): the 11 items in education that state legislation has granted faculty ownership over in the CCC:.

- curriculum, including establishing prerequisites and placing courses within disciplines;
- 2. degree and certificate requirements;
- 3. grading policies;
- 4. educational program development;
- 5. standards or policies regarding student preparation and success;
- 6. district and college governance structures, as related to faculty roles;
- faculty roles and involvement in accreditation processes, including self-study and annual reports;
- 8. policies for faculty professional development activities;
- 9. processes for program review;
- 10. processes for institutional planning and budget development; and

11. other academic and professional matters mutually agreed upon between the governing board and the academic senate.

CHAPTER 2: REVIEW OF RELATED RESEARCH

This study examined a professional development program, the Equity-Minded Teaching and Learning Institute (EMTLI), which is aimed at improving teaching and learning to address course-level racial equity gaps for California Community College students from historically racially marginalized communities. Therefore, this literature review examines and discusses topics such as the teaching and learning approaches employed by the EMTLI at the center of this study: culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002), and the community cultural wealth model (Yosso, 2005). This chapter also reviews the setting of the study, the CCC, along with pertinent areas within it that relate to the implementation of effective teaching and learning approaches with students from historically racially marginalized communities in the United States. *Historically racially marginalized* communities and students of color are used in this study refer to Black or African American, Latino or Mexican American, Native American or Alaskan Native, Hawaiian or Pacific Islander, and Filipino communities in the United States, all of which have historically been underrepresented, underserved, and denied education opportunities because of race in the United States.

Organization of the Literature Review

To ensure the literature fits in the appropriate discussion, it is broken up into sections based on its relevance. This study applies a critical race theory lens across sections looking at race, culture, society, and power as variables to be taken into consideration and discussed. The literature review begins with a section focused on the CCC system. This includes a brief history of the CCC, an overview of the California

Master Plan for Higher Education, an analysis of intent and the outcomes, an analysis of faculty structures such as the academic senate and professional development, systemwide faculty demographics, and a discussion of existing statewide racial equity gaps for students from historically racially marginalized communities. In the sections that follow, attention shifts to a discussion of the foundational teaching and learning approaches employed in the EMTLI: culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002) and the community cultural wealth model (Yosso, 2005.

In an effort to best analyze and discuss the foundational approaches that guide the EMTLI in a similar manner, sections are placed according to the framework introduced by Aronson and Laughter (2016) in their work synthesizing culturally relevant pedagogy (Ladson-Billings, 1995) and culturally responsive teaching (Gay, 2002). They identified four shared core components: academic skills and concepts, critical reflections, cultural competence, and critique of discourses of power. Using these shared components identified by Aronson and Laughter (2016) as their own sections allows for effective incorporation of the community cultural wealth model (Yosso, 2005) into the relevant literature and discussion, while staying true to the EMTLI approach. Concluding the literature review is a final section outlining the topics of discussion it covered

The California Community Colleges

The CCC system is a publicly funded higher education system made up of 116 colleges spread out throughout the state. The first college was established in Fresno in 1910 (Community College League of California [CCLC], 2019). With 2.1 million students attending the CCC, 53.97% of whom are from historically racially marginalized communities, the CCC has become both one of the largest and most diverse systems of

higher education in the United States (CCCCO, 2020). This growth has been the direct result of the CCC being an open access system, which means anyone in the state is eligible to attend, regardless of academic history and preparation. Being open to all in the state of California naturally creates a racially diverse student population.

The initial CCC institution, the Collegiate Department of Fresno High School, later referred to as Fresno Junior College, was established in 1910 by the Fresno Board of Education. It was desired by both the Fresno Board of Education and the University of California (UC; Boggs & Cater, 1994). The initial idea behind the formation of the Collegiate Department of Fresno High School is believed to have been championed by the UC. As Douglass (2010) explained, the UC was highly motivated to preserve the ideal of the university while providing a new and relatively low-cost mechanism to increase access to higher education. This newly established academic setting also alleviated political pressures created by low admittance rates into the state's elite higher education institutions. A year later, Santa Barbara Junior College joined Fresno Junior College; by 1917, 14 additional junior colleges were established in California (CCLC, 2019). With time and state population growth, the California junior colleges would grow in numbers and soon become the largest educational institution in the United States.

The California Master Plan

The most significant change to the junior colleges arrived 50 years after the Collegiate Department of Fresno High School opened in 1910. This was a plan to reform the state's public higher education system, led by both public and private universities and pressure from state legislators. Once again, the UC was at the forefront, because it did not want to allow California Governor Pat Brown to reorganize the existing public higher

education institutions under a single governing board, thus reducing their status and funding as the primary research institution in the state (Douglass, 2010). Negotiations resulted in the adoption of the California Master Plan for Higher Education in 1960, which grouped all public higher education institutions into three statewide tiers or systems: the Junior College, California State, and the University of California. The stated purpose of this master plan, according to university leaders and state legislators central to its development, was to make higher education readily accessible to all Californians by organizing the systems according to their goals and designating specific admissions policies for the different populations in the state (Callan, 2009; Douglass, 2010).

The first tier, formerly the California Junior Colleges and now the California Community Colleges, was to be the primary access point to higher education for nonuniversity-bound high school students through courses that would transfer to baccalaureate-granting institutions, as well as a vast array of remedial, vocational, and technical courses (Callan, 2009; Douglass, 2010). The junior colleges would be open to all in California who could benefit from attendance, a critical aspect that would later be labeled *open access*. This open access to anyone who could benefit from attending resulted in a vast array of students of all races, ages, genders, religions, disabilities, citizenship statuses, and educational backgrounds enrolling in community colleges. In essence, open access fulfilled the initial purpose of the master plan to provide educational access and opportunities leading to upward mobility for people in California (Callan, 2009; Douglass, 2010). The second tier of higher education was the state colleges, now the California State University (CSU), which focused on teacher preparation and undergraduate and graduate education through the master's degree, with the possibility of

joint doctoral degree programs with the research institutions. The third tier was the University of California (UC), which offered undergraduate, master's, and doctoral degrees (Callan, 2009; Douglass, 2010).

Intention and Outcomes

Because the setting of this study is a CCC, it is important to provide a brief CRT analysis of both the intent and the actual outcomes of the California Master Plan for Higher Education. This discussion focuses on issues related to this study, but it will also highlight CRT criticisms of the master plan. While the master plan actually reduced both general student enrollment and diversity at both CSU and UC, that was not the case for the CCC, as it was the most impacted of the three higher education systems in California (Douglass, 2010). As a result, the CCC is now one of the largest systems of higher education in the United States, with 2.1 million students attending its 116 colleges (CCCCO, 2020).

From a CRT perspective, two key questions require further analysis. First, what demographic group or groups were set to benefit the most from this plan for higher education? (Rivera-Lacey, 2016). Secondly, with such a heavy focus on vocational training in the first tier, was the underlying intent of the master plan to maintain the existing social class? (Wells, 2008). This first critique can be drawn out of California's racial composition in 1960, especially among the group most affected by the master plan, the state's under-20 population. As shown in Table 1, the under-20 population in California was 72% White in 1970, and Whites would continue to be a significant majority until 2000, when they were surpassed by the Latino or Mexican-American population by 44% to 35% (Trust-West, 2017). This led many to believe the under-20

population could not have been any more diverse at the time the master plan was developed in the 1960s. With the under-20 population being dominated by the White demographic group until 2000, it is easy to conclude whom the master plan was meant to serve.

Table 1

Ethnicity	1970	1980	1990	2000	2010	2020
Black or African American	8%	9%	8%	7%	6%	5%
Native American or Alaskan Native	0.4%	0.8%	0.7%	0.6%	0.4%	0.4%
Asian or Pacific Islander	3%	5%	10%	10%	11%	12%
Latino or Mexican American	16%	27%	36%	44%	51%	51%
White	72%	57%	45%	35%	28%	27%

California Under 20 Population by Ethnicity (1970–2020)

The enrollments in the CCC, CSU, and UC between 1948 and 2005 are shown in Table 2. Callan (2009) suggested this shows the clear difference before and after the 1960 master plan within the three public systems of higher education. Between 1948 and 1950, the CCC enrolled about 15,000 more students than UC; beginning in 1960, the difference in enrollments expanded to over 54,000 and would reach over 920,000 by 2005. Meanwhile, the CCC averaged a little over 30,000 more enrollments than the CSU between 1948 and 1960; beginning in 1970, that jumped to 330,000 and by 2005 it would reach more than 790,000 enrollments. The large population growth after 1960, specifically within communities of color in the state, only exacerbated inequities to accessing the CSU and UC (Callan, 2009). Although the argument could be made that these numbers actually show the master plan working, as it provided an increase in access

to higher education in the state, Rivera-Lacey (2016) pointed out that increased access to education for Latinos or Mexican Americans via CCC actually increased inequalities.

Table 2

Enrollment in California Public Higher Education (1948–2005)

Enrollment	1948	1950	1960	1970	1980	1990	2000	2005
CCC	55,933	56,624	97,858	526,584	752,278	818,755	999,652	1,121,681
CSU	22,787	25,369	61,330	186,749	232,935	272,637	279,403	324,120
UC	43,465	39,492	43,748	98,508	122,761	152,863	165,900	201,403

Second, with the master plan intentionally creating a first tier of higher education to provide vocational options for those deemed not eligible to attend a university, it could be concluded that funneling students into vocational careers actually maintained the social class while preserving CSU and UC as elite academic institutions for the dominant majority (Wells, 2008). This conclusion about funneling students to vocational areas has been reinforced over time, as the CCC is now the largest provider of workforce training in the United States (CCCCO, 2020). Demographic shifts in California since 1960—in 2015–2016, the state population was 39% Latino or Mexican American, 38.8% White, 13.4% Asian and Pacific Islander, and 5.8% Black or African American—only strengthen the critique of the master plan, because most students being ushered into vocational options are from historically racially marginalized and oppressed communities in the United States (Guaracha, 2017).

Despite the criticisms of the actual intent and outcomes behind the 1960 master plan to create access to higher education for all in California, the silver lining remains the bridge CCC became in accessing higher education for people from historically racially marginalized communities (Rivera-Lacey, 2016). While the bridge was less than perfect, it had at minimum created a valuable access point where students of color could attain a postsecondary education, which has now become a prerequisite for social mobility (Rivera-Lacey, 2016; Zapata, 2019). This access has increased over time, as student demographics in the CCC continue to shift and, as Table 2 shows, make it the largest access point into higher education for people from historically racially marginalized communities (Callan, 2009). However, it must be noted that students of color continue to be severely underrepresented in historically White colleges and universities (Yosso et al., 2004). From a national perspective, data indicate that communities with nearby community colleges have higher college attendance rates and a high student aspirations, with three fourths of first-time students stating their educational goal is attaining a bachelor's degree (Wells, 2008).

To further expand on the access the CCC bridge provides students of color, Table 3 shows that a majority (54%) of students attending CCC in 2017–2018 were from historically racially marginalized communities in the United States, and 69% were from non-White populations in California (CCCCO, 2020). In disaggregating each group further to identify male students, Guaracha (2017) stated that 45.5% of Latino or Mexican American males between the ages of 15–24 were attending CCC, in contrast to 29% of Black or African American males, 26.6% of White males, and 22.8% of Asian males. The fact that a majority of CCC students now represent historically racially marginalized communities further reinforces both the importance of the bridge to higher education and the need to address the existing racial equity gaps. As Bragg and Durham (2012) concluded, access without intentional efforts for success does not result in equitable outcomes.

Table 3

Student ethnicity	CCC percentage	CCC # students
Black or African American	5.90%	123,900
Native American or Alaskan Native	0.43%	9,030
Asian	11.56%	242,760
Filipino	2.69%	56,490
Latino or Mexican American	44.54%	935,340
Native Hawaiian or Pacific Islander	0.41%	8,610
White	25.88%	543,480
Multiethnic	3.82%	80,220
Unknown	4.77%	100,170

CCC Student Demographics by Ethnicity (2017–2018)

The Academic Senate

Despite the diversity of students attending the 116 colleges in the CCC system, similarities exist between all the institutions regardless of the communities they serve or their geographical location because of the centralized structure that ensures colleges comply with the mission defined by California legislation. That mission states:

The California Community Colleges shall, as a primary mission, offer academic and vocational instruction at the lower division level for both younger and older students, including those persons returning to school. Public community colleges shall offer instruction through but not beyond the second year of college. These institutions may grant the associate in arts and the associate in science degree. (CLI, 1997)

The most significant of these centralized CCC structures for the purpose of this study is the concept of shared governance and, more specifically, the role of the academic senate. The academic senate's role is to address academic and professional matters as outlined in the so called 10+1. Because the primary point of contact for students is the classroom (Zapata, 2019), the elimination of racial equity gaps via year-long programmatic professional development focused on improving teaching practice, posture, pedagogy, curriculum, and the use of a student asset approach is inextricably tied to the academic senate. As a result, systematic change tends to be a daunting task because state legislation protects the purview of CCC faculty in academic and professional matters (Academic Senate for California Community Colleges [ASCCC], 2020d). This protection ensures faculty autonomy with all professional development, thus any workshop, class, or program must be offered on a voluntary basis regardless of the topic, focus, or identified need (Cepeda, 1991).

Having such autonomy is problematic because instructors tend to adhere to certain traditional pedagogical practices that have become irrelevant and outdated. It could be said that they are solely regurgitating teacher-centered, race-neutral, lecturebased instruction because they themselves learned that way (Sleeter, 2017). Despite the existence of course-level racial equity gaps, the system in place allows CCC instructional faculty to resist adopting new pedagogical strategies or technologies. College administration cannot direct them to do otherwise (Conn, 1997). To be clear, this is not a critique of the existence of the CCC academic senate; rather, the function and mechanism must be highlighted for discussion because CCC faculty are the primary stakeholders along with students—in the implementation of this study.

The academic senate was established in 1963 under California Assembly Concurrent Resolution No. 48 for the purpose of ensuring faculty were represented in the development of policy on academic and professional matters. While this was a key

resolution, it was not until 1988, with the passage of Assembly Bill 1725 by

Vasconcellos, that the role and function of the academic senate was clarified and codified (Livingston, 1998). AB1725 provided the academic senate with the specific authority it now enjoys in the CCC. Not only that, this bill instructed college administrators to increase the full-time to part-time faculty ratio to 75:25, which no college has ever achieved. In addition, and most importantly, it was the first time that the racial demographics of the instructional staff was addressed (Livingston, 1998).

AB 1725 defined the academic senate as the organization whose primary function at each CCC was to make recommendations with respect to academic and professional matters (Conn, 1997). This legislation led to the development of what is now commonly known as the 10+1 faculty purview, which covers the following 11 academic and professional matters in the CCC (ASCCC, 2020a);

- curriculum, including establishing prerequisites and placing courses within disciplines;
- 2. degree and certificate requirements;
- 3. grading policies;
- 4. educational program development;
- 5. standards or policies regarding student preparation and success;
- 6. district and college governance structures, as related to faculty roles;
- faculty roles and involvement in accreditation processes, including self-study and annual reports;
- 8. policies for faculty professional development activities;
- 9. processes for program review;

- 10. processes for institutional planning and budget development; and
- 11. other academic and professional matters as mutually agreed upon between the governing board and the academic senate.

The 10+1 faculty purview is facilitated and maintained by the academic senate at each college via the elected senate leadership: a president, vice president, and senate officers, along with senate subcommittees or workgroups that make recommendations on academic and professional matters for the senate to vote on (ASCCC, 2020d). In addition, the senate appoints faculty to district and college shared governance councils, committees, subcommittees, workgroups, and task forces, to ensure the senate's voice is heard and that it is informed of all college planning matters. The leadership and efforts carried out via the academic senate are the mechanisms that maintain a boundary between the faculty 10+1 and the classified staff, administrators, executives, and community college governing boards (ASCCC, 2020d).

In essence, this boundary is the legal protection afforded CCC faculty. It recognizes that faculty are subject matter experts in their discipline with authority over related academic and professional matters. Most significantly, this protection directly supports faculty during times of aggressive or incompetent administrative oversight (ASCCC, 2020d). While the academic senate has authority established via AB1725, this varies according to how the senates have negotiated this authority with their respective governing boards. Some senates have a mutually-agree policy while others have a rely-primarily policy with their boards that is codified by board policy (Livingston, 1998). A rely-primarily policy is stronger than a mutually-agree policy. Governing boards set policy; as such, they are also responsible for racial equity gaps in the CCC.

Professional Development

Community college teacher preparation programs are rare, yet they are abundant for K-12 (Biggs et al., 2018); additionally, formal teaching preparation is not a hiring requirement for either full- or part-time faculty at any of the CCCs (Sheehan, 1994). Minimum qualifications are a master's degree in the discipline, a bachelor's degree in the discipline and a related master's degree, or any degree and professional experience; this is according to the Disciplines List for CCC faculty, which is informed by the academic senate and backed by the California Education Code (Woodyard & Levy. 2018). There is no codified requirement for hiring faculty based on years of actual teaching experience or teacher preparation either at the CCC or at another level of higher education that may or may not include the university level (Locke, 2004). With no teaching experience in the minimum hiring requirements for each discipline, each CCC campus is set up to possibly make those decisions. The structures and protections in place delineating minimum qualifications in each discipline for hire, along with areas directly connected to teaching and learning—such as student preparation and success, curriculum, grading, and professional development-can complicate the implementation of systemic changes to how teaching and learning is practiced in the CCC (ASCCC, 2020d).

With this study focused on professional development in CCC, it is important to provide a brief review of what is expected and how it functions in practice. The flexible calendar authorized by Title 5, section 55720 and 58188, allows the CCCs to set aside 1–15 days (flex days) of the state-mandated teaching year (175 days) for professional development purposes; this set-aside time is to be used primarily by faculty for professional development activities related to teaching and learning improvement

(Cepeda, 1991). Structures are in place at each campus to support efforts to facilitate the content of flex days at each campus, either led by a faculty member appointed by the academic senate or guided by a committee reporting to the academic senate (ASCCC, 2020b). This model of professional development tends to rely on self-motivation for improvement because it requires each faculty member to self-select events from a wide array of options to attend during flex days to meet their required number of professional development hours for each semester (ASCCC, 2020c). The set number of hours each faculty member must complete varies by college, but it is guided by Title 5, Sections 55720 and 58188, and the faculty contract in place at each college, using a calculation based on the number of units being taught in the upcoming semester (Cepeda, 1991).

This CCC model of professional development is centered on both faculty selfmotivation and professional development activities that interest them; therefore, this model lacks the strength to incentivize professional growth or a focus on research-based strategies for improvement (ASCCC, 2020c). As such, no mechanism or mandates are in place to require or encourage CCC faculty to engage teaching and learning strategies that address existing equity gaps identified in their practice. This reliance on faculty selfmotivation and personal desire to innovate teaching and learning has made it difficult for the CCC to develop and implement a systemic method of addressing historical and persistent racial equity gaps in course success rates, which are presently 16% for Black or African American students, 12% for Pacific Islander students, 11% for American Indian or Alaska Native students, and 9% for Latino or Mexican American students (CalPassPlus, n.d.). Another issue for faculty outlined in the work by Zapata (2019) is the growing number of them who say they are losing inspiration because of fatigue with the

amount of initiatives driven by the CCCCO, which were referred to as "flavors of the month."

These flavors have included the Basic Skills Initiative, the Student Success and Support Programs, Strong Workforce Program, Student Equity, and most recently Guided Pathways, Elimination of Remedial Ed (AB 705), and the California College Promise (AB 19; Zapata, 2019). To complicate matters, they are not systemically interconnected to address racial equity issues in the classroom; thus, silos abound and success is limited. This is not to imply that faculty are not genuinely motivated to improve their teaching and learning practices. Rather, it is to highlight the systemic problems and lack of intentionality to address course-level racial equity gaps in the classroom through research-based methods that can be explored through robust professional development programs.

Statewide Faculty Demographics

Forming part of a system with centralized structures creates similarities among the 116 colleges. Unfortunately, these similarities are also apparent in the lack of racial diversity among the faculty, which starkly contrasts with the demographics of the students they serve. This racial disparity between students attending the CCC and those who are teaching, advising, and exercising college faculty leadership roles unintentionally creates equity-based issues that directly and indirectly impact students from historically racially marginalized communities in the United States. While we can debate intentionality, the result is a continued distortion of the historical and social reality of people from racially marginalized communities. Thus, a White middle-class standard remains the academic experience for students of color (Ladson-Billings, 2018). Also, as

is the case in most educational settings in the United States, White faculty usually do not share home communities or have interactions outside the academic setting with students from historically racially marginalized communities. This only heightens the disparity in realities between students of color and White faculty (Gay, 2010).

Table 4 shows that the dominant demographic group in all CCC sectors of faculty is White, slightly ranging from a high of 59% in full-time faculty to a low of 58% in parttime faculty (CCCCO, 2013). In contrast, student demographics (see Table 3) show that White students make up 26% of the student population while Latinos or Mexican-Americans make up 45%. This demonstrates that faculty do not reflect the majority of students attending the CCC (CCCCO, 2020). This is problematic on its own, but the issue worsens with the absence of professional development activities that address disparities that arise because of this lack of diversity. Highlighting racial disparity in a thoughtful and intentional manner is critical, because research shows teachers require more than a quick fix approach to better understand the language, cultural, and educational issues facing the students they serve. They need to fully understand their students so they can design appropriate, culturally responsive learning experiences that meet their needs (Juettner, 2003).

With this study primarily focused on teaching and learning, a deeper look is needed into the demographics of the academic senates in general, and the faculty in particular, because instruction is where there is the largest racial disparity in comparison to student demographics. The academic senate racial composition in the 2016–2017 academic year had the following breakdown: 72% White; 14% Latino or Mexican American; 7% Asian American, Native Hawaiian or Pacific Islander; and 5% Black or

African American. In contrast, the racial composition of the students was 43% Latino; 27% White; 14% Asian American, Native Hawaiian, or Pacific Islander; and 6% African American (Bustillos & Siqueiros, 2018). This means that the White members of the academic senate overrepresent the student population by 45% despite the fact that students of color are the majority in the CCC system. It is important to keep this fact in mind when taking into consideration that the academic senate's role in the 10+1 directly influences the issues raised in this study.

Table 4

CCC Faculty Demographics by Ethnicity (Fall 2019)

Ethnicity	Part-time faculty	Full-time faculty	
Black or African American	5.74%	6.28%	
Native American or Alaskan Native	0.66%	0.58%	
Asian or Pacific Islander *	11.37%	10.81%	
Latino or Mexican American	15.55%	17.13%	
White	58.27%	58.51%	
Multiethnic	1.47%	1.6%	

Note. Filipino not disaggregated from grouping of Asian or Pacific Islander.

In 2019, similar demographics prevailed: full-time faculty were 58% White while non-White students made up 69% of the CCC student population (CCCCO, 2013; CCCCO, 2020). These percentages are not necessarily the most accurate for displaying the racial disparity between instructional faculty and students because these numbers include parttime and full-time student services faculty. This includes counseling areas within different student support programs where diversity is more pronounced. This means that the 58% of White part-time and 59% of White full-time faculty are actually conservative percentages compared to the actual numbers if faculty demographics were disaggregated by student services and instruction. Unfortunately, there is no CCC systemwide data available that provides this level of disaggregation, which is a significant weakness when discussing faculty demographics.

Statewide Racial Equity Gaps

The terms *racial equity* and *racial equity gaps* are used in this study over historical terms found in the educational literature, such as *racial achievement* and education gap. This is intentional and the direct result of the meaning and principle behind both terms. In her foundational work as director of the Center for Urban Education at the University of Southern California, Bensimon (2018) conceptualized both racial equity and equity-mindedness, and emphasized that Whiteness is the reason behind persistent racial inequality in higher education, not the so-called achievement gap. Therefore, any authentic implementation of racial equity and equity-mindedness requires intentional focus on structural inequality and institutionalized racism, with responses resulting in systemic changes. The CUE defined racial equity as a two-dimensional concept, one representing institutional accountability demonstrated by racial parity in student outcomes and the other representing a critical understanding of the commonality of Whiteness at the institutional and practice levels (Bensimon, 2018). The work of Bensimon (2018) aligns well with this study because the concept of equity-mindedness and the CUE's definition of racial equity stem from CRT and are the preferred terms in reference to both racial inequalities in CCC and disparities in academic achievement.

With each incoming academic year, the CCC serves over one million students who comprise a highly racially diverse population, as can be seen in Table 3 (CCCCO, 2020). Arriving with such a diverse student population are vast amounts of community

cultural wealth, academic histories, educational trauma, interpersonal experiences, disabilities, socioeconomic situations, gender identities, religions, cultures, and an array of desired education and career goals. Waiting for them in classrooms each academic year are full- or part-time faculty experts in each academic discipline. While the disciplinary expertise of the faculty is not questioned, there are concerns over traditional curriculum, perceptions, and teaching practices specifically for students from historically racially marginalized populations. The existing CCC course-level and institutional racial equity gaps support these concerns and highlight the need to improve, regardless of best intentions.

Unfortunately, faculty have not been adequately prepared by their graduate programs to teach such a racially diverse student population. More specifically, CCC faculty received graduate training through the same academy, which Paris (2012) pointed out has been focused in this country on creating a monocultural and monolingual society centered on White middle-class norms and traditional Eurocentric instruction based on meritocracy and power. The academy was also described by Freire (2018) as the banking concept of education, where students are solely empty vessels for faculty to fill with the knowledge, as described by Paris (2012). Therefore, when they begin teaching, faculty will instinctively replicate the color-blind, race-neutral, meritocratic learning environment that they experienced regardless of their own racial background (Yosso et al., 2004). This replication of traditional curriculum, structures, and discourses continues the ongoing distortion, omission, and stereotyping of the experiences of students from historically racially marginalized communities. This serves to rationalize discriminatory curricular processes that maintain structures of racial, gender, and class inequality in

schools (Yosso, 2002). Additionally, if most instructional faculty do not reflect the racial composition of the 1.2 million students they teach, they may face challenges identifying and validating the community cultural wealth and lived experiences of students from historically marginalized and oppressed populations in the United States (Gay, 2002).

The outcomes of the academy's color-blind, race-neutral curriculum and meritocratic teaching, plus the effects of Whiteness, structural inequalities, and institutionalized racism, can all be seen in the persistent racial equity gaps in the CCC. These are detailed in Table 5, which summarizes the 2017–2018 student success metrics disaggregated by ethnicity (CalPassPlus, n.d.). Table 5 indicates that the lowest performing population in each student success metric is the 123,607 Black or African American students, while the 224,518 Asian students are the highest performing population. The actual disparities by percentage between the two populations are 18% in course success rates, 9% in fall-to-spring retention, 14% for completion of transfer-level math and English courses, and 2.1% in transfer to a postsecondary university. In comparison, the 927,802 Latino or Mexican American students, who represent the largest population in the state, show a disparity of 11% in course success, 2% in fall-to-spring retention, 11% for completion of transfer-level math and English courses, and 1.2% in transfer to a postsecondary university. Further analyzing the outcomes in relation to the 537,749 White students, the following equity gaps are present for the 2017–2018 academic year in each student success metric (CalPassPlus, n.d.):

- Course success rates
 - o 16% for Black or African American students
 - o 12% for Native Hawaiian or Pacific Islander students

- o 11% for Native American or Alaskan Native students
- o 9% for Latino or Mexican American students
- Retention
 - o 6% for Black or African American students
 - o 5% for Native American or Alaskan Native students
 - o 4% for Native Hawaiian or Pacific Islander students
- Completed transfer-level math and English
 - o 7% for Black or African American students
 - o 6% for Native American or Alaskan Native students
 - o 5% for Native Hawaiian or Pacific Islander students
 - 4% for Latino or Mexican American students
- Transferred to postsecondary education
 - o 1.1% for Black or African American students

Table 5

CCC Course Success, Retention, Math, English, and Transfer by Race (2017–2018)

Student ethnicity	# Enrolled	Course success rates	Retention fall to spring	Completed transfer level math & English	Transferred to postsecondary
Black or African American	123,607	62%	64%	3%	1,226 (0.99%)
Native American or Alaskan	8,515	67%	65%	4%	158 (1.80%)
Native					
Asian	224,518	80%	73%	17%	6,909 (3.00%)
Native Hawaiian or Pacific	8,173	66%	66%	5%	152 (1.85%)
Islander					
Filipino	52,720	76%	73%	17%	735 (1.30%)
Latino or Mexican American	927,802	69%	71%	6%	17,107 (1.80%)
White	537,749	78%	70%	10%	7,546 (1.40%)
Multiethnic	72,593	71%	71%	11%	997 (1.30%)
Unknown	109,751	79%	64%	6%	1,870 (1.70%)

While these are critical racial equity gaps, they are only a piece of the larger equity gap puzzle and by no means the only equity gaps in the CCC. Therefore, in using a CRT lens, it is important to disaggregate within each of the student demographics to look at intersectionality among populations to identify more equity gaps in each group. This intersectionality allows more populations to analyzed among each student group by religion, gender, LGBTQIA, foster youth, veterans, and undocumented and immigrant status students. (CalPassPlus, n.d.).

Equity-Minded Teaching and Learning Approaches

The experiences, interactions, and inequitable outcomes for students from historically racially marginalized communities in the United States attending one of California's 116 community colleges were the motivating factors behind the conceptualization, development, and implementation of the EMTLI. The current and historical academic trauma caused by a race-neutral, White-culture-dominated, and Eurocentric instruction that has omitted the factual experiences and histories from CCC curriculum, along with the lack of research focused on classroom instruction, directly informed the selection of CRT-driven methods to construct the EMTLI. Its goals were to identify an effective training for CCC instructional faculty, develop awareness of the damage being caused to students from historically racially marginalized communities by traditional instruction, and introduce effective teaching methods to allow for the elimination of course-level racial equity gaps. As a result, it became imperative to develop a study to examine the effectiveness of this vehicle of professional development being implemented at a CCC in San Diego County by the Office of Institutional Effectiveness, Success, and Equity.

The year-long program of professional development being examined in this study, the EMTLI, is the vehicle proposed for improvement in content-based teaching practices, because it is focused on equity-minded teaching and learning methods. The teaching and learning methods employed by the EMTLI to help faculty implement change in their pedagogy and teaching practice are grounded on three CRT-based models: culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002), and community cultural wealth (Yosso, 2005). These models were identified for EMTLI based on extensive research in the field of education that validated their need for development and practice. Maybe just as important, they were also chosen because of the proven commitment of Ladson-Billings, Gay, and Yosso to social justice in education and envisioning the classroom as the ultimate vehicle for social change.

This strand of educational research stemming from a CRT lens has its origins in school desegregation in the 1960s and 1970s in the United States. It has evolved into the two primary strands advanced by Ladson-Billings and Gay (Aronson & Laughter, 2016). The work of Yosso (2005) with community cultural wealth in the field of higher education strengthens and complements the use of both models in EMTLI because of its natural alignment with both the Gay and Ladson-Billings models in regards to offering a countermodel to the traditional deficit-based approach. Also, her critique of meritocracy allows for broad discussions about the systemic issues it causes (Ladson-Billings, 1995; Gay, 2002; Yosso, 2005).

Three basic goals drive the work of the institutes with each yearly cohort of faculty, each of which is layered and has a broad focus. Each was also developed and selected as the standardized EMTLI goal in efforts to ensure effective use of individual

faculty's racially disaggregated course-level data and an alignment with CRT-based approaches: culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002), and the community cultural wealth model (Yosso, 2005). The EMTLI goals are the following:

- Assist participating faculty in the use of their racially disaggregated course level data to identify strengths and weaknesses in their teaching practice, better understand their equity data stories, and also set goals to achieve more equitable outcomes in their classes.
- Facilitate an understanding of the national and local history of race and racism, Whiteness in institutions, racial oppression, and the system of meritocracy, specifically their impact on Higher Education and classroom culture.
- Support implementation of classroom and curricular changes based on critical race theory approaches: culturally relevant pedagogy, culturally responsive teaching, and the community cultural wealth model, plus assess interventions to engage in a cycle of continuous improvement.

Culturally Relevant Pedagogy

One of the early key scholars who furthered the work of Bell and later presented her own CRT alternative to traditional educational pedagogy was Ladson-Billings (1995, 1998, 2014, 2016, 2018). She pointed out that sociolinguistic explanations have failed to include the larger social and cultural contexts of students from historically racially marginalized communities, and cultural ecologists have failed to explain student success. As such, she predicated a need for culturally relevant theoretical perspective on the growing disparity between the racial, ethnic, and cultural characteristics of teachers and students, along with the continued academic failure of students from historically oppressed and marginalized groups (Ladson-Billings, 1995, 1998, 2014, 2016, 2018).

She also suggested that culturally relevant teaching must meet three criteria: an ability to develop students academically, a willingness to nurture and support cultural competence, and the development of a sociopolitical or critical consciousness (Ladson-Billings, 1995,1998, 2014, 2016, 2018). Hence, culturally relevant pedagogy in the classroom requires instructors to set high expectations and emphasize academic success for all, foster cultural competence and the formation of a positive cultural identity, teach critical consciousness, and develop a critical consciousness to critique or interrupt current and historical social inequities (Ladson-Billings, 1995; Morrison et al., 2008). What this entails is for classroom practitioners to make a conceptual shift and purposely focus on the value of acknowledging, validating, and reinforcing who students are (cultural competence); what they are capable of (high expectations); and incorporating the wealth of riches they bring (critical consciousness) to the classroom as part of the regular curriculum (Ladson-Billings, 1995, 1998, 2014, 2016, 2018).

Culturally Responsive Teaching

The extensive work of Gay (2002, 2010, 2013, 2018) in education via CRT established the notion that teaching is most effective when the prior experiences, community setting, cultural backgrounds, and ethnic identities of teachers and students are included in the teaching and learning process, particularly for students from historically racially marginalized communities. Gay labeled this teaching approach as culturally responsive teaching (Gay, 2002, 2010, 2013, 2018). She later defined it as a teaching practice that uses the cultural knowledge, prior experiences, frames of reference, and performance styles of racially and ethnically diverse students to make the learning process more relevant to and effective for them (Gay, 2002, 2010, 2013, 2018).

Culturally responsive teaching demands that practitioners approach students from an asset-based perspective instead of a deficit-based approach and then create changes on multiple levels to improve learning for students, including instructional techniques, instructional materials, student-teacher relationships, classroom climate, and selfawareness (Gay, 2002, 2010, 2013, 2018). As such, Gay's (2010) culturally responsive teaching model rests on the following six dimensions, as highlighted by Aronson and Laughter (2016, p. 165):

- Culturally responsive teachers are socially and academically empowering by setting high expectations for students with a commitment to every student's success.
- Culturally responsive teachers are multidimensional because they engage cultural knowledge, experiences, contributions, and perspectives.
- Culturally responsive teachers validate every student's culture, bridging gaps between school and home through diversified instructional strategies and multicultural curricula.
- Culturally responsive teachers are socially, emotionally, and politically comprehensive as they seek to educate the whole child.
- Culturally responsive teachers are transformative of schools and societies by using students' existing strengths to drive instruction, assessment, and curriculum design.

• Culturally responsive teachers are emancipatory and liberating from oppressive educational practices and ideologies as they lift "the veil of presumed absolute authority from conceptions of scholarly truth typically taught in schools."

Community Cultural Wealth

Yosso (2005) introduced a CRT critique of meritocracy and traditional views on social capital and offered the field an alternative model to help foster social and racial justice for communities of color in education. She did this by challenging French sociologist Pierre Bourdieu's idea of social capital, where the knowledge of the upper and middle class are considered to hold capital value in a hierarchical society such as ours. Therefore, if people are not born into families whose knowledge is already deemed valuable, a formal education would provide them access to the knowledge of the middle and upper class, creating upward social mobility (Bourdieu & Passeron, 1977). Yosso (2002; 2005) analyzed how Bourdieu's social capital concept has been key to validating Eurocentric instruction based on meritocracy and power, which has also created a simple rationale for explaining why people from historically racially marginalized populations in the United States, "the colored, disadvantaged or underprivileged," struggle in academic settings. She added that it has been and remains the lens through which educational institutions and the government have attempted to address the issue (Yosso, 2002, 2005).

In providing an alternative to counter such flawed assumptions, Yosso (2005) conceptualized that all forms of capital can actually be used to empower individuals. Therefore, she designed her community cultural wealth model to capture the talents, strengths, and experiences that students from communities of color bring to the college environment. The CRT framework behind the community cultural wealth model seeks to

nurture and establish how students from communities of color access and experience college from a strengths-based perspective as a way to challenge and counter the traditional deficit-based narrative (Yosso, 2005). Additionally, she defined community cultural wealth as an array of knowledge, skills, abilities, and contacts possessed and utilized by communities of color to survive and resist macro and micro forms of oppression (Yosso, 2005). The community cultural wealth model is captured by the following six types of capital developed by Yosso (2005, p.77-80):

- *Aspirational capital* refers to the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers. This resiliency is evidenced in those who allow themselves and their children to dream of possibilities beyond their present circumstances, often without the objective means to attain those goals.
- *Linguistic capital* includes the intellectual and social skills attained through communication experiences in more than one language and/or style and reflects the idea that Students of Color arrive at school with multiple language and communication skills. In addition, these children most often have been engaged participants in a storytelling tradition, that may include listening to and recounting oral histories, parables, stories (*cuentos*) and proverbs (*dichos*). This repertoire of storytelling skills may include memorization, attention to detail, dramatic pauses, comedic timing, facial affect, vocal tone, volume, rhythm and rhyme. Linguistic capital also refers to the ability to communicate via visual art, music or poetry.
- *Familial capital* refers to those cultural knowledge nurtured among *familia* (kin) that carry a sense of community history, memory and cultural intuition. This form

of cultural wealth engages a commitment to community well-being and expands the concept of family to include a broader understanding of kinship. Acknowledging the racialized, classed and hetero-sexualized inferences that comprise traditional understandings of 'family', familial capital is nurtured by our 'extended family', which may include immediate family (living or long passed on) as well as aunts, uncles, grandparents and friends who we might consider part of our familia. From these kinship ties, we learn the importance of maintaining a healthy connection to our community and its resources.

- Social capital can be understood as networks of people and community resources. These peer and other social contacts can provide both instrumental and emotional support to navigate through society's institutions. Drawing on social contacts and community resources may help a student identify and attain a college scholarship. These networks may help a student in preparing the scholarship application itself, while also reassuring the student emotionally that she/he is not alone in the process of pursuing higher education.
- Navigational capital refers to skills of maneuvering through social institutions.
 Historically, this infers the ability to maneuver through institutions not created with Communities of Color in mind. For example, strategies to navigate through racially hostile university campuses draw on the concept of academic invulnerability, or students' ability to 'sustain high levels of achievement, despite the presence of stressful events and conditions that place them at risk of doing poorly at school and, ultimately, dropping out of school'.

Resistant capital refers to those knowledge and skills fostered through
oppositional behavior that challenges inequality. This form of cultural wealth is
grounded in the legacy of resistance to subordination exhibited by Communities
of Color. Furthermore, maintaining and passing on the multiple dimensions of
community cultural wealth is also part of the knowledge base of resistant capital.

Shared Components

The work of Aronson and Laughter (2016) highlighted how Gay focused on teaching and primarily sought to influence competency and methods, describing what a teacher should be doing in the classroom to be culturally responsive, while Ladson-Billings focused on pedagogy and primarily sought to influence attitudes, academic skills, concepts, and dispositions to describe the posture a teacher might adopt to determine planning, instruction, and assessment. Aronson and Laughter (2016) noted the importance of differentiating the two, because they focus on separate but complementary types of outcomes. Teaching affects competence and practice whereas pedagogy affects attitude and disposition. Although the focus may differ, both frameworks present visions undergirded by a firm commitment to social justice education and seeing the classroom as a site for social change. This complementary yet separate focus by both Ladson-Billings and Gay on teaching and learning, plus the addition of the community cultural wealth model provided by Yosso and the concept of equity-minded provided by Bensimon (2018), all stemming from CRT, are synthesized into my approach in this study to help redefine and support the concept of equity-mindedness. It also nicely aligns with the purpose of the EMTLI.

In this final part of the literature review, I use this redefined equity-minded approach to revise the original definitions of the four shared components from culturally relevant pedagogy and culturally responsive teaching, identified by Aronson and Laughter (2016): academic skills and concepts, critical reflections, cultural competence, and critique of discourses of power. I present an updated definition of the equity-minded educator, while also creating a lens to continue reviewing pertinent literature. Therefore, the next four subsections continue the review and discussion of the existing literature regarding effective equity-minded teaching and learning approaches with CCC students from historically marginalized and oppressed populations in the United States. Given the lack of literature, findings from similar settings will be brought into the discussion.

Academic Skills and Concepts

Equity-minded educators use constructivist methods to develop bridges connecting students' cultural references and community cultural wealth to academic skills and concepts. Equity-minded educators build on the knowledges and community cultural wealth that students bring into the classroom. The equity-minded classroom is inclusive of all students.

Guaracha (2017) focused on examining why men of Mexican descent who enroll in a CCC have such high attrition rates. They showed higher levels of persistence when their professors (a) communicated a sense of respect and openness to engage, (b) expected and encouraged questions, (c) regularly checked in and inquired about students' well-being, and (d) were accessible both inside and outside of class. In an examination of how instructors tell stories in ways that undergraduate students find relevant or irrelevant to their lives, Kromka et al. (2020) concluded after an analysis of 388 open-ended student

surveys that relevant storytelling is an effective teaching practice that supports learning only when the instructor can make it relevant for the students' culture, classroom needs, or personal struggles.

Morris et al. (2008) synthesized classroom-based research on the implementation of culturally relevant pedagogy, examining 45 classroom-based research studies from 1995 to 2008 and highlighting culturally relevant pedagogy as enacted in classrooms. They identified effective approaches by practitioners in connecting cultural experiences to the content of practice in the classroom and a willingness to adapt and normalize cultural norms that may not be common to the practitioner. N. A. Luna and Martinez (2013) studied reasons for Latino students' low academic achievement and the factors that support school success by employing Yosso's community cultural wealth model. They concluded that, to better serve the Latino population, educators need to gain an indepth understanding of how Latino students are shaped and influenced by their cultural communities. In research examining the influences of social and cultural capital on student persistence from the first to second year in college, Wells (2008) concluded that social and cultural capital have a positive effect on student persistence in postsecondary education.

Smith and Ayers (2006) presented a cross-section of research, practice, and discourse focused on expanding knowledge of, and sensitivity to, the diverse learning needs of community college learners. They recommended that faculty shift away from traditional Western world views and adopt a more equitable and inclusive teaching approach. In a study examining CCC faculty and their pedagogical practices through an asset-based lens, Zapata (2019) highlighted the importance of connecting students' lived

experiences to classroom instruction. In their most recent work assessing the role and function of first-generation equity practitioners in higher education, Bensimon and Gray (2020) identified specific characteristics that are seen in effective equity-minded practitioners, such as not claiming to "not see race" nor attempting to treat everyone equally in the classroom.

Critical Reflection

Equity-minded educators engage students in critical reflection about their own lives and societies. In the classroom, equity-minded educators use inclusive curricula and activities to support analysis of all the cultures represented.

Biggs et al. (2018) detailed evidence-based components they suggest should be included in effective literacy programs that prepare developmental reading instructors and how community colleges have actualized these evidence-based components through an analysis of similarities and differences among curricular offerings. They highlighted the need of community college educators to practice reflective and critically aware instruction to enable them to address the ways in which literacy skills and attitudes develop in postsecondary years at the intersection of race, gender, initial levels of reading comprehension, and attitude toward literacy activities from the college freshman year and onward. Morrison et al. (2008) discovered in their synthesis of classroom-based research on the implementation of culturally relevant pedagogy by examining 45 classroom-based research studies from 1995 to 2008 that the most effective curriculum was one that integrates authors of color and nonmainstream content into the traditional curriculum along with the selection of non-Eurocentric teaching materials and topics.

Martin (2014), in her exploration of the impact of reading *Huckleberry Finn* on both teacher and students through the lens of CRT in a racially diverse urban high school environment, pointed out that changes to curriculum are important in eliminating academic failure for students from historically marginalized and oppressed populations, but curriculum change alone without critical reflection by educators could actually do more harm than good. Paris (2012) offered the term and stance of *culturally sustaining pedagogy* as an alternative to other approaches. This embodies some of the best research and practice in the resource pedagogy tradition and supports the value of our multiethnic and multilingual present and future. He asserted that current culturally based practices do not provide enough explicit support for the linguistic and cultural dexterity and plurality necessary for success and access in demographically changing schools and communities. The characteristics identified in effective higher education equity-minded practitioners by Bensimon and Gray (2020) also highlight a genuine personal investment in educating themselves to be aware of how racialization operates in classroom interactions, routines, and neutral choices.

Cultural Competence

Equity-minded educators facilitate students' cultural competence and community cultural wealth. The equity-minded classroom is a place where students learn about both their own culture and community cultural wealth and others to develop pride in their own and others' cultures and community cultural wealth.

In her work examining CCC faculty and their pedagogical practices through an asset-based lens, Zapata (2019) concluded that pedagogies of *cariño* by faculty proved to be effective. She defined these as trust-building practices and interactions that are

cognizant of students' life context; go above and beyond what is required of educators; and help create an environment of inclusion and visibility for all students, especially those from marginalized communities. An intrinsic case study by Palkki, (2015) chronicled the experiences of two Latina students enrolled in a high school in a Midwestern community and also showed that the teacher–student relationship was a primary method in which the student is validated for being themselves. Martin's (2014) narrative work exploring the impact of reading *Huckleberry Finn* on both teacher and students through the lens of CRT in a racially diverse urban high school environment demonstrated how the chosen practitioner approach is critical to creating effective classroom outcomes and can also help remediate errors in judgment by the practitioner.

In their work examining issues with the educational pipeline that results in Chicana/os suffering the lowest educational attainment of any major racial or ethnic group in the United States, Yosso and Solórzano (2006) recommended less reliance on high-stakes, inappropriate testing and assessment and training bilingual, multicultural educators to challenge traditional cultural deficit thinking. Bensimon and Gray (2020) identified core qualities found in effective equity-minded practitioners in the higher education setting. They pointed out that an effective equity-minded practitioner in higher education will have a concrete understanding of the importance of prioritizing racial equity, not stray away from race in the process, and also never allow socioeconomic status to take precedence in the approach or in defining the reasons for a lack of achievement for students of color.

Critique of Discourse of Power

Equity-minded educators explicitly unmask and unmake oppressive systems through a critique of discourses of power. Equity-minded educators work not only in the classroom but also in the active pursuit of social justice for all members of society.

Harris and Wood (2014), in their research on disparate outcomes between boys and men of color in comparison to their female and White counterparts, concluded that an intentional approach was needed to improve learning outcomes for men of color, specifically to help counter overrepresentation of Black and Latino men in the California criminal justice system. With a lack of educational practitioners who resemble the student populations they serve, Howard and Navarro (2016) analyzed the influence of CRT on educational research and evaluated what effect, if any, it had on school policy. They suggested using curriculum that entails a discourse on race and institutional racism, but also noted that this would require a practitioner well-versed in the topics and in acknowledging their own privilege.

Responding to the literature documenting chronic and persistent educational underachievement found among low-income, first-generation, Latino/a community college student populations, Rivera-Lacey (2016) researched those experiences at a CCC and identified a blind awareness of community college institutional practices that negatively impacted their academic achievement. Morrison et al. (2008) synthesized classroom-based research on the implementation of culturally relevant pedagogy, examining 45 classroom-based research studies from 1995 to 2008. They highlighted how critical it is to have practitioners in education who genuinely embrace social justice and student equity in implementing teaching and learning methods for students of color

to close achievement gaps. This was echoed by Martin (2014) and Palkki (2015) in each of their studies focused on teaching students from historically racially marginalized populations in school settings.

M. S. Luna (2016) employed the tenets of CRT to examine the influence of using teacher performance assessments with diverse early childhood preservice teachers in a graduate program. They concluded educational practitioners who understand the world through a social justice lens have the innate ability of teaching with methods designed to successfully redistribute cultural capital to students of color. Bensimon and Gray (2020) identified characteristics of effective equity-minded practitioners in higher education based on 20 years of equity efforts in higher education by the CUE. They concluded that the acceptance and understanding of Whiteness as an embedded characteristic in institutional practices and practitioners in higher education is necessary for an effective equity-minded practitioner.

Chapter Summary

This chapter provided a vast amount of research on the CCC and the students enrolled in it. This included an overview of the CCC system, the California Master Plan for Higher Education, a critique of the intent and outcomes of the plan, the function of the academic senate, the system of faculty professional development, statewide faculty demographics, and the statewide racial equity gaps in the CCC. This chapter also introduced my redefined version of equity-minded, using the complementary yet separate approaches of Ladson-Billings (1995) with culturally relevant pedagogy and Gay (2002) with culturally responsive teaching, infused with the community cultural wealth model

provided by Yosso (2005) and the original concept of equity-minded (Bensimon, 2018). All of these stem from CRT.

This redefined concept of equity-mindedness was used to review literature on equity-minded teaching and learning in the CCC with students from historically racially marginalized communities in the United States. Also reviewed was literature on the EMTLI, along with its foundational CRT approaches: culturally relevant pedagogy, culturally responsive teaching, and the community cultural wealth model.

With such limited literature on equity-minded teaching and learning practices in the CCC with students from historically racially marginalized communities in the United States, literature from similar settings was also reviewed in this chapter. For this reason, the findings from this study will improve upon effective equity-minded teaching and learning practices at the CCCs and add much-needed literature on this topic.

CHAPTER 3: METHODS

This chapter describes the methods used in this study to examine the program of professional development at the center of this study, the Equity-Minded Teaching and Learning Institute. This includes the research questions that guided the study, the context, research design, paradigm, setting, participants, a detailed description of the EMTLI, the conceptual framework for change, and the data collection and analysis implemented to answer the three research questions.

Research Questions

To help examine whether the 32 faculty who completed EMTLI either in spring/fall 2019 or fall/spring 2019–2020 were influenced by their participation in EMTLI to improve their pedagogical and teaching practices and their perceptions of students from historically racially marginalized communities, this study addressed the following three questions:

- 1. Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute?
- 2. Do faculty demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute?
- 3. Do faculty who participated in a year-long Equity-Minded Teaching and Learning Institute find it to be an effective program of professional development for addressing course-level racial equity gaps?

Null Hypothesis: The null hypothesis for the quantitative research question (RQ1) was: There will be no significant difference in faculty likelihood of implementing equity-based approaches in the classroom after participating in a year-long EMTLI. An alpha level of .05 was selected for statistical significance.

Context of the Study

This study was inspired by the longstanding classroom inequities in the CCC experienced by students from historically racially marginalized communities; the vast amount of CRT literature on education; and, as Zapata (2019) pointed out in her work examining teaching and learning in the CCC, the lack of literature investigating the CCC classroom. There is also a lack of literature on effective CRT methods for addressing these chronic classroom inequities for such students attending the CCC. As Howard and Navarro (2016) stated, scholars do not fully understand how CRT translates into research, theory, and practice to achieve educational equity; hence, there are few concrete examples of how to use it in educational practice. Aside from a lack of understanding of CRT in practice, another inspiration was critiques from academic advocates for colorblind or race-neutral policies, who firmly argue that a recognition of race only perpetuates racial antagonism and racism (Powers, 2007).

The initial concept of the EMTLI examined in this study was my collaboration with the Office of Institutional Effectiveness, Success, and Equity at the college where the study took place. The goal for EMTLI was to develop an effective year-long program of professional development for full- and part-time instructional faculty at the college centered on CRT methods. This was under the guise of equity-minded to maintain continuity in the language used in the CCC and because CRT is not a common practice in

the CCC. After the EMTLI template was created, the ensuing cohorts were implemented and facilitated by the college's Office of IESE and me. Because of the length and nature of the EMTLI and it being much more robust than traditional professional development offerings, the Office of IESE compensated faculty for their participation in the EMTLIs.

Research Design

I used a mixed-methods explanatory sequential design (see Figure 1) for this study for the following reasons: (a) the nature and process of the program of professional development being examined, the EMTLI; (b) the facilitation of EMTLIs along with the administration and collection of quantitative survey data had been completed under the purview of the Office of IESE; (c) while I was a collaborator in the design, development, and implementation of the EMTLIs, the institution was the proprietor so I had to ask the Office of IESE for the quantitative data for the two completed cohorts of EMTLI (spring/fall 2019 and fall/spring 2019–2020); and (d) the lack of baseline quantitative or qualitative data primarily focused on participants' perceptions of students from historically racially marginalized communities and whether they felt the program was effective created the need to implement participant interviews based on the quantitative phase. These interviews would help further explain the surveys by examining participants' perceptions of students from historically racially marginalized communities and whether they believed the program was effective.

Based on these circumstances, when reviewing the literature on research designs and paradigms for this study, it was clear the direct line was:

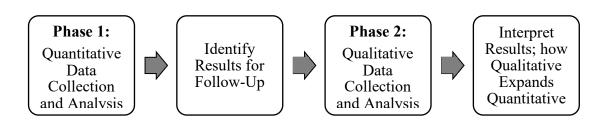
The pragmatic worldview in mixed methods approach, where the researcher bases the inquiry on the assumption that collecting diverse types of data best provides a

more complete understanding of a research problem than either quantitative and qualitative data alone. This type of study begins with a broad survey in order to generalize results to a population and then, in a second phase, focuses on qualitative, open ended interviews to collect detailed views from participants to help explain the initial quantitative survey. (Creswell & Creswell, 2018, p. 17)

With this definition in mind, I concluded that a valid examination of the EMTLI would be best accomplished via a pragmatic worldview of mixed-methods explanatory sequential design (see Figure 1). The explanatory design chosen for this study was defined by Creswell (2014) as involving a separate two-phase data collection approach starting with a quantitative phase. Those results will inform the second, qualitative, phase of research. The phases remain separate until the researcher connects the quantitative results to inform the qualitative data collection. This would be the first point of integration, with the second point of integration coming during the discussion of how the qualitative phase helped expand on the quantitative phase.

Figure 1

Explanatory Sequential Design



Research Paradigm

The worldview chosen for this study was the pragmatic paradigm, which is described as follows:

Arose among philosophers who argued that it was not possible to access the 'truth' about the real world solely by virtue of a single scientific method as advocated by the Positivist paradigm, nor was it possible to determine social reality as constructed under the Interpretivist paradigm. For them, a monoparadigmatic orientation of research was not good enough. Rather, these philosophers (such as Alise & Teddlie, 2010; Biesta, 2010; Patton, 1990; Tashakkori & Teddlie, 2003a, 2003b) argued that what was needed was a worldview which would provide methods of research that are seen to be most appropriate for studying the phenomenon at hand. So, these theorists looked for approaches to research that could be more practical and pluralistic approaches that could allow a combination of methods that in conjunction could shed light on the actual behaviour of participants, the beliefs that stand behind those behaviours and the consequences that are likely to follow from different behaviours. (Kivunja & Kuyini, 2017, p. 35)

Additionally, Creswell and Creswell (2018) shared that because it is not committed to a singular perspective or reality, the pragmatic paradigm allows for the application of diverse approaches to identify knowledge about the research problem instead of focusing on previously existing conditions. This provides choices within mixed-methods studies for researchers to decide their assumptions, data collection, worldviews, and methods, but the purpose and rationale for the need to mix quantitative

and qualitative data must be clearly stated. This study needed participant interviews based on the quantitative phase, focused on changes to pedagogy and practice, to further examine participants' perceptions of students from historically racially marginalized communities. In addition, the pragmatic paradigm states that all research takes place in social, historical, political, and other contexts; hence, a theoretical lens for a mixedmethods study can be based on social justice with a focus on political efforts (Creswell & Creswell, 2018). This supports the nature of this study, which was driven by CRT with a focus on improving the experiences of students from historically racially marginalized communities attending the CCC.

Population and Sample

This study was conducted at a CCC within a two-college district located in San Diego County. A convenience sample was implemented in this study because the program of professional development being examined (EMTLI) was a college-wide effort supported by the Office of IESE that was open to all full- and part-time faculty teaching at the college. The convenience sample began with 40 full- and part-time multidisciplinary CCC faculty who volunteered to participate in one of two EMTLIs: spring/fall 2019 and fall/spring 2019–2020. Of the 40 faculty who volunteered to participate in EMTLI, eight dropped out for various reasons after beginning one of the EMTLIs. This resulted in 32 faculty (N = 32) successfully completing one of the two EMTLIs being examined in this study and receiving EMTLI completion certificates.

The college identified for this study is a Federally designated Hispanic Serving Institution that enrolls approximately 9,000 students each semester. The college and all programs within it are accredited through the Western Association of Schools and

Colleges. Like most CCCs, the college where this study took place serves a highly diverse student population but lacks faculty diversity in the instructional unit and has long-standing racial equity gaps in overall classroom course success. In comparison to the CCC statewide faculty demographics, the college where this study took place had higher percentage rates of White faculty in both the full- (+16%) and part-time (+10%) ranks. The college percentages from the 2018 fall semester faculty demographics show 74% of full-time and 69% of part-time faculty at the college were White (CCCCO, 2013). Again, these numbers would be higher if there was a disaggregation for student services faculty because those are the areas of the CCC where faculty diversity exists.

In comparison, the 2018 fall semester demographics for students who attended the college where this study took place show that 46% were White, 34% were Latino or Mexican American, 8% were multiethnic, 6% were Black or African American, 3% were Asian, 2% were Filipino, and 1% were Native American (CCCCO, 2013). An important factor to consider when discussing the college's student demographics is the presence of a large population of students of Middle Eastern descent who are statistically identified as White by the college and district. With the college and district currently unable to disaggregate the Middle Eastern student population from the White student totals, there are suggestions that once disaggregation occurs, the 46% White student numbers could be greatly reduced. If this were to be true, it would most likely result in the 34% Latino or Mexican American student population becoming the largest served at the college.

With respect to classroom outcomes, Table 6. shows the fall 2018 racially disaggregated course success rates for the college where this study took place. These outcomes are similar to the CCC fall 2018 statewide racially disaggregated course

success rates found in Table 5. These tables also show differences in the two sets of course-level outcomes, which will be discussed shortly. Similarities in course-level outcomes can be identified in the racial equity gap, which for the Black or African American population was 16%, for the Latino or Mexican American population was 10%, and for the Filipino population was 5% (CCCCO, 2013). Two differences between the CCC and the college are found in the outcomes for the Native American or Alaskan Native population and the Pacific Islander population. The Native American or Alaskan Native population at the college outperformed their CCC counterparts in course success by 13%, yet an equity gap of 5% still remains at the college for the population. Meanwhile, the Pacific Islander population at the college greatly underperformed their CCC counterparts, by 21%, and had the largest equity gap at the college at 35%.

Table 6

College-wide Racia	lly Disaggregated	Course Success	Rates, Fall 2018

Ethnicity	Course success rates		
Black or African American	62%		
Native American or Alaskan Native	75%		
Asian	81%		
Pacific Islander	45%		
Filipino	76%		
Latino or Mexican American	70%		
White	80%		

Note. Excludes "multiethnic" and "unknown/not reported" categories.

This study employed a convenience sample because the program of professional development examined in this study, the EMTLI, was completely voluntary for teaching faculty at the college. Therefore, the convenience sample at first consisted of 40 full-time and part-time CCC teaching faculty who voluntarily participated in one of two EMTLIs:

spring/fall 2019 and fall/spring 2019–2020. Unfortunately, not all 40 faculty who began one of the two EMTLIs completed it. The number of faculty who completed one of the two EMTLIs examined in this study was 32.

To protect the identities of the 32 EMTLI participants, their discipline areas, ethnicity, and gender are all broadly mentioned because in some cases there is only one faculty member in a specific discipline at the college. The ethnic and gender breakdown for the 32 EMTLI completers was as follows: White—13, Latino or Mexican American— 11, Middle Eastern—6, other non-White—2; 24 were women and 8 were men. As shown in Table 7, six content areas were represented by the 32 faculty who completed EMTLI. Not all 32 EMTLI completers complied with filling out a post-EMTLI survey, and with no identifiers for the Office of IESE to follow up, the end result was 40 pre- and 29 post-EMTLI surveys.

Table 7

EMTLI Completers by Discipline Spring/Fall 2019 and Fall/Spring 2019–20

Discipline	# of participants		
Science, technology, engineering and math (STEM)	2		
History, humanities	5		
Communication and language arts	11		
Environmental and applied technology programs	1		
Social behavior sciences	10		
Counseling services	3		

For the second, qualitative, phase of this study, I used specific criteria to select faculty from the convenience sample of 32 EMTLI completers who I invited to participate in an individual interview. These criteria consisted of: (a) successful completion of EMTLI, (b) equal representation between full- and part-time faculty, (c) ethnic and racial diversity, and (d) representation of different content areas. Based on these criteria, 18 faculty were identified and invited via email (see Appendix B) to participate in an interview for the second, qualitative, phase of this study. The participant consent form (see Appendix C) was attached to the invitation email. After email invitations were sent out to the 18 identified faculty, I received 11 responses (n = 11) with a signed consent form from the faculty wishing to participate in the interview. Therefore, 11 interviews were set up and conducted by me via Zoom using structured questions (see Appendix F) for the second phase of this study. No compensation was provided to faculty by me for participation in the interview.

Equity-Minded Teaching and Learning Institute

The EMTLI is a year-long program of professional development for full- and part-time faculty teaching at the college where this study took place. It is facilitated by the college's Office of IESE and me. The EMTLIs were guided by equity-minded teaching and learning methods, which cannot be defined by one specific teaching theory or approach. They are a sum of approaches found within culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2002, and the community cultural wealth model (Yosso, 2005).

These were the foundational approaches within EMTLI deriving from CRT in education, which make up the equity-minded teaching and learning approach within all the EMTLIs. These CRT approaches were integrated to prepare teaching faculty on topics such as redistributing cultural capital, shifting the classroom power dynamic, practitioner's awareness of the impact of their own race along with the race of their

students, and acknowledging the social and historical context of race in higher education and the impact of race on educational opportunities in the United States.

During the first semester of the EMTLI, faculty received their disaggregated classroom data and analyzed it in order to self-identify strengths and weaknesses in their current practices and develop goals to address areas of concern. Faculty then participated in a series of 2-hour sessions that introduced the varied topics of equity-mindedness and how to apply those principles to teaching and learning. In the second semester, faculty participants made curricular or pedagogical changes intended to close equity gaps and assessed their interventions. The EMTLI goals are:

- Assist participating faculty in the use of their racially disaggregated course level data to identify strengths and weaknesses in their teaching practice, better understand their equity data stories, and also set goals to achieve more equitable outcomes in their classes.
- Facilitate an understanding of the national and local history of race and racism, Whiteness in institutions, racial oppression, and the system of meritocracy, specifically their impact on higher education and classroom culture.
- Support implementation of classroom and curricular changes based on CRT approaches: culturally relevant, culturally responsive, and community cultural wealth approaches, plus assess interventions to engage in a cycle of continuous improvement.

Conceptual Framework

The conceptual framework selected for the implementation of EMTLI was directly borrowed from design thinking (Rowe, 1987). It was modified for the purpose of

implementing a year-long program of professional development for faculty in a higher education setting. Design thinking was used because it offered an effective model of change and flexibility in adjusting the content and length of time for EMTLI. This design thinking framework can be traced back to Peter Rowe of Harvard University, who was the first to provide a systematic account of the process of designing in architecture and urban planning via his book, *Design Thinking* (Rowe, 1987). He was soon followed by Tim Brown of the design firm IDEO, who would go on to adjust the design thinking process for applicability beyond the initial intended setting of architecture and urban planning (Brown & Katz, 2011). Rowe and Brown are widely accepted as the two primary individuals responsible for design thinking and as the ones who brought it to the wider public outside of the confines of architecture and urban planning.

As for how design thinking actually functions, Brown and Katz (2011) escribed it as a user-centered approach to problem solving with these six ingredients:

- Empathize, as the best designs are human centered. Putting human beings at the center of the process helps us create and maintain humanity as we innovate and move forward.
- Define, as framing the problem is the foundation to the design. Starting with the right question(s) is everything.
- Ideate, since innovation is born from the class of ideas. By grafting on to ideas and transforming ideas from different sources to fit our context, we get the best solutions. Rare is the transformative idea that emerges fully formed from one person or one source.

- Prototype, by showing and not telling. Experiencing solutions is far more engaging and illuminating than telling people about them.
- Test, as live testing and iterating is what brings innovations to life. Without that essential step, there are just a lot of intriguing ideas.
- Start again, iterate the flow as much as time allows.

This six-step design thinking framework was borrowed and modified in content and length of time for the purposes of implementing a year-long program of professional development for faculty in a higher education setting, but the central process of change from design thinking remained intact. This revised six-step process was adopted for each year-long program of professional development at the center of this study, the EMTLI.

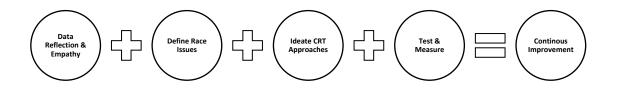
The following is the EMTLI version of design thinking framework:

- Reflection and Empathy; faculty receive and then reflect on campus and department-level data, as well as their individual, disaggregated campus and course-level data, then discuss and identify the student experience, along with the casualties from replicating the academic system (students and faculty).
- Define Race Issues; faculty participate in a robust in-depth look at the history of institutionalized racism in the United States and in higher education, the White Eurocentric Academy, meritocracy, plus explore our interconnectedness as people.
- Ideate CRT Approaches; faculty learn about and how to implement critical race theory methods; culturally relevant pedagogy, culturally responsive teaching, and community cultural wealth model.
- Prototype to Content; faculty identify CRT-based classroom changes they wish to implement and then adapt them for their individual content area

- Test and Measure; faculty implement CRT-based course and curricular changes in the classroom and develop plan of assessment with help from the campus research office.
- Continuous Improvement; faculty discuss how adopting a culture of continuous improvement using racially disaggregated course level data will assist in leading them to eliminate racial achievement gaps in their classrooms.

Figure 2

Design Thinking for EMTLI



With this modified design thinking framework (see Figure 2) guiding the EMTLI process, and with it being a year-long process consisting of 14 sessions of 2 hours each, it allowed complex CRT topics (issues of race, Whiteness, racism, meritocracy, oppression, etc.) that make up equity-minded teaching and learning to be covered in multiple sessions and in various formats. To be clear, because CRT guides the content covered in equity-minded teaching and learning, this type of approach and content is not conventional for most CCC faculty. As such, it must be handled carefully and strategically as to not to lose participant interest and be facilitated in a manner that follows the modified design thinking framework. It includes equity-minded teaching and learning topics such as race, the history of institutionalized racism in the United States and in higher education, the

White Eurocentric academy, meritocracy, our interconnectedness as people, culturally relevant pedagogy, culturally responsive teaching, and community cultural wealth. It then shifts to a process of ideation and prototyping on how to apply it based on content. This results in a unique adaptation of the design thinking framework for faculty professional development.

Data Collection and Analysis: Explanatory Sequential Design

This study employed an explanatory sequential design to collect and analyze the quantitative and qualitative data. An explanatory sequential design, as explained by Creswell and Creswell (2018), involves a separate two-phase data collection approach. It starts with a quantitative phase, the results of which are used to help inform the second phase of research, which is qualitative. When interpreting results, the qualitative phase should expand on the quantitative phase. The phases remain separate until the researcher connects the quantitative results to inform the qualitative data collection. This would be the first point of integration in a study; the second is when discussing how the qualitative results helped expand the quantitative results.

The quantitative phase for this study was comprised of faculty survey data previously collected at the beginning and conclusion of each EMTLI cohort by the college's research unit, the Office of IESE, for the two cohorts of EMTLI (spring/fall 2019 and fall/spring 2019–2020) examined in this study. This included 40 pre- and 29 post-EMTLI surveys administered and collected from faculty participants in the two EMTLI cohorts, with no identifiers. Once IRB approval was granted by St. John's University, an official request was submitted to the college's IESE to provide me the previously collected 40 pre- and 29 post-survey data from the two cohorts of EMTLI.

Once the request to the Office of IESE was approved by the district, the survey data with no identifiers was provided to me via an IBM SPSS file. Outcome data from the 40 pre- and 29 post-EMTLI survey data was then reviewed. To address RQ1 and directly inform the qualitative phase, a repeated-measures/within-subjects *t*-test comparison was run on IBM SPSS. This comparison was performed for the nine pre and post responses on the 4-point Likert scale survey items. To build on the data analysis results from the quantitative phase, I identified the need for interviews and specific questions to ask EMTLI completers in the qualitative phase. The qualitative phase began by identifying interview questions that could help build on the data analysis results. Next, I created a screening and recruitment process for EMTLI completers to volunteer to participate in interviews. Last, based on screening and recruitment efforts, 11 individual interviews were facilitated online via Zoom web services by me to help address RQ2 and RQ3, which build on RQ1.

Phase 1: Quantitative Data Collection

The explanatory sequential mixed-methods design in this study began with an initial quantitative phase comprised of previously administered survey outcomes from two cohorts of EMTLI: spring/fall 2019 and fall/spring 2019–2020. These EMTLI surveys for both cohorts were previously administered and collected by the college's Office of IESE. After implementing and collecting surveys, the Office of IESE collected 40 pre- and 29 post-EMTLI surveys from the two cohorts of EMTLI: spring/fall 2019 and fall/spring 2019–2020. This pre and post survey data from EMTLI faculty participants was provided to me via an IBM SPSS file with no identifiers by the college's Office of IESE.

Instruments. For this study, I used existing quantitative data from pre and post responses on 4-point Likert scale survey items within EMTLI faculty participant surveys. These surveys were developed, administered, and collected with no identifiers by the college's research unit, the Office of IESE. These surveys were intended to retrieve participant insight on the efficacy of EMTLIs and to be used for continuous improvement by the Office of IESE. The instruments used to gather the quantitative data for this study were the existing surveys developed and administered by the Office of IESE (see Appendix D and E). Each EMTLI facilitated by the Office of IESE and me as a part of ongoing college-wide efforts, but all faculty participation was voluntary.

Data Collection. The EMTLI survey data used in this study were previously administered and collected by the college's research unit, the Office of IESE. The use of surveys is standard practice for both college efforts and institutional planning via the Office of IESE. The Office of IESE follows the coordinated college/district policies and procedures for performing all institutional research at the college and the district. After St. John's University IRB approval (see Appendix A) was granted to me, a research request was submitted via the Office of IESE to the college district institutional research office, which was then approved by the district and the college. At that point, I was provided the EMTLI survey data with no identifiers via an IBM SPSS file.

Data Analysis. Once the Office of IESE provided me the EMTLI survey data with no identifiers via an IBM SPSS file for the quantitative phase, a repeated-measures/within-subjects *t*-test comparison was run for nine pre and post responses on the 4-point Likert scale survey items to determine whether faculty were more likely to implement specific equity-minded practices in their courses after participating in the

EMTLI. Additional data collected from these EMTLI surveys were comprised of verbatim participant responses detailing insights gained and self-identified improvements during EMTLI. All of these addressed RQ1 while also directly informing the development of interview questions (see Appendix F) used in the 60-minute individual interviews via Zoom with the 11 participants who volunteered from the 18 selected EMTLI completers from the convenience sample (N = 32).

Phase 2: Qualitative Data Collection

The second phase of this study, the qualitative phase, consisted of 60-minute online individual interviews conducted via Zoom with the 11 EMTLI completers who volunteered to participate in this study. These 11 volunteers were among 18 who met the interview criteria and were sent an invitation to participate in this study by me. I conducted the interviews with video cameras on, recorded each session, and had each recording transcribed using Zoom web services. The development of the interview questions was directly informed by the first phase of this study, the quantitative survey results, and thoughtfully crafted to help address RQ2 and RQ3 of this study. The interview questions (see Appendix F) used in this study were necessary to best answer RQ2 and RQ3 because the initial quantitative phase alone could not fully address these research questions.

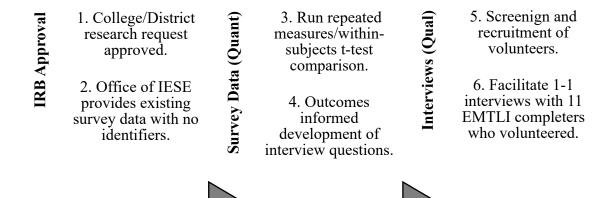
Instruments. Once the survey data was analyzed using IBM SPSS via a repeatedmeasures/within-subjects *t*-test comparison for nine pre and post responses on the 4-point Likert scale survey items, the outcomes of this data analysis and the additional data from the quantitative surveys were used to directly inform the development of the interview questions. The purpose of this was to expand on the outcomes of the quantitative phase in

the qualitative phase and address the research questions. These interview questions were then used in the individual online Zoom interviews conducted by me with the 11 EMTLI completers who volunteered to participate in this study. These interviews were administered based on participant availability. The interview questions (see Appendix F) comprise the instrument used for the qualitative phase of this study.

Data Collection. Once St. John's University provided IRB approval for this study, I submitted a college/district research request via the college's Office of IESE, which was then approved by the district and college. At that point, I was given the existing EMTLI survey data with no identifiers via an IBM SPSS file. A repeatedmeasures/within-subjects t-test comparison was run on IBM SPSS for pre and post responses on the 4-point Likert scale survey items to determine whether faculty were significantly more likely to implement specific equity-minded practices in their courses after participating in the EMTLI. The outcomes of this analysis and additional survey data informed the development of the specific interview questions used in the qualitative phase of this study to expand on the quantitative phase. I sent invitation emails (see Appendix B) to each of the 18 EMTLI completers who met the interviewee criteria. This email invitation asked for volunteers to participate in this study via individual 60-minute recorded interviews conducted by me online using Zoom web services. The participant consent form (see Appendix C) was attached in the invitation email, with instructions for it to be returned to me with their signature if they were interested in participating in the study.

Figure 3

Process for Data Collection

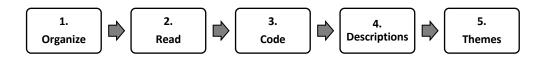


I received 11 emails from EMTLI completers who wanted to participate in this study and attached their signed consent forms. These 11 EMTLI completers who agreed to participate in this study via online interviews received a pseudonym in the form of a capital letter ranging from O to Z, to protect confidentiality. All interviews were conducted by me online, recorded, and transcribed using Zoom web services. At the conclusion of each interview, both video recording and transcription files were downloaded from Zoom and stored on a USB drive that was kept in a locked file cabinet located at my home office. The 11 interviews conducted with EMTLI completers expanded on the quantitative findings about the implementation of equity-minded classroom practices and identified changes to participants' perceptions of historically marginalized and oppressed students. Additionally, the interviewed participants from historically marginalized communities and whether EMTLI was an effective program of professional development for addressing course-level racial equity gaps.

Data Analysis. For the EMTLI participant interview data collected, I followed the five-step qualitative data analysis process outlined by Creswell and Creswell (2018). This process (see Figure 4), called for me to adhere to the following steps: (a) organize and prepare the data for analysis, (b) read or look at all the data, (c) start coding all the data, (d) generate a description and themes, and (5) represent the description and themes (Creswell and Creswell, 2018). To comply with the five-step qualitative data analysis process outlined by Creswell and Creswell (2018), as each of the 11 online interviews for this study were completed, the recorded interview video and the transcribed file were downloaded from Zoom to a USB drive that was stored in a locked file cabinet located at my home office. Before being downloaded, each interview transcript file was organized and prepared for data analysis, which meant each transcript file received a pseudonym in the form of a capital letter ranging from O to Z. This designated capital letter was also placed in the transcript to replace the participant's name for all responses to interview questions to protect confidentiality.

Figure 4

Five-step Qualitative Data Analysis Process



Once all the interview video and transcript files were downloaded into the USB drive, the transcript files were then looked over by me for a general sense of the ideas

being shared. At this point, the transcripts were uploaded to NVivo, a qualitative data analysis software purchased by me for this study. The interview transcripts now incorporated in the NVivo software were then systematically organized, coded, and annotated by me. These codes were then grouped into themes and assigned as either expected themes, surprising themes, or unusual themes. Descriptions were generated for each theme.

Presentation of Findings

I present the findings of this study based on the explanatory sequential procedure, which calls for presenting the discussion in the following format: first-phase quantitative results to address RQ1; then the second-phase qualitative results, informed by the first phase and the first point of integration, to address RQ2 and RQ3, including representation of the themes observed through the interview data; and finally, discussing how the qualitative data results helped expand on the quantitative results, the second point of integration. For this study, this meant discussing the quantitative survey outcomes first, then the outcomes from the qualitative interviews, and then how the interviews expanded on the survey outcomes. This allowed the sharing of participants' individual stories while in EMTLI, as well as meaningful and accurate quotes about the effects of the program. In addition to reporting on survey and interview data, I also tied the findings back to the literature related to equity-minded teaching. Limitations noticed throughout the study were documented and suggestions for further research and practice in the area of equity-minded teacher preparation are provided based on the outcomes of this study.

Ethical Considerations

Faculty participation in this study was completely voluntary. I took all recommended precautions and followed an outlined process to ensure there was no risk of physical, social, economic, or legal harm resulting from participating in this study. This allowed me to keep participant confidentiality in place during all aspects of this study.

Potential Research Bias

I am a first-generation Mexican American who grew up in a low-income status and attended multiple CCCs after high school. As a CCC student, I was considered a nontraditional college student from a historically racially marginalized community. My initial experience attending a CCC after high school was short lived because of feelings of academic and cultural inadequacy, along with prior academic trauma, which resulted in academic disqualification after the first year of college. I would not return to college, instead joining the workforce in the field of automotive technology. Two years later, because of peer pressure and support from friends with similar backgrounds who were achieving success at a CCC, I decided to return to a different CCC. This second act resulted in a successful transfer to a University of California campus within 2 years. While attending the CCC, I had many struggles and successes within the classroom. While the content of courses was important, it was the relationship with the instructor that left the largest impression.

After receiving a bachelor's degree from a University of California campus, I completed an equivalency for a Master of Education and also received a Master of Science degree from a California State University campus. Soon after, I was hired as a

faculty member at the community college where this study took place. Prior to the conception and implementation of EMTLI and this study, I moved into an administrative position at this same college under the Office of IESE. As such, there was a level of bias that could have gotten in the way of conducting a quality study if there was no awareness and acknowledgement of my positionality.

As a scholar–practitioner who codeveloped and cofacilitated the EMTLIs, I was completely aware of how my own life experiences with racial oppression, Whiteness, and racism, have shaped my ideology and approach to both the EMTLI process and this study. Therefore, to counter all potential bias, I remained conscious of these influences and purposely held continuous check-ins during both EMTLI cohorts and during this study with my co-facilitators and members of the college's Office of IESE. These checkins were extremely helpful to ensure all the components of the EMTLI processes and this study remained free of any form of bias or personal agenda from me. As a result, I continued to be deliberately conscious to allow the authenticity of the data outcomes to always take center stage throughout the research data collection, analysis, and presentation process.

CHAPTER 4: RESULTS

California Community Colleges serve over a million students from historically racially marginalized communities, resulting in chronic racial disparities in classroom outcomes in all 116 colleges within the CCC. The classroom is the primary point of contact for students. This study of efforts to eliminate classroom racial disparities for such students used a critical race theory lens to implement a mixed-methods explanatory sequential design to examine teacher preparation via a program of professional development, the Equity-Minded Teaching and Learning Institute.

The research questions guiding this mixed-methods explanatory sequential design study were the following:

- Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute?
- 2. Do faculty demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute?
- 3. Do faculty who participated in a year-long Equity-Minded Teaching and Learning Institute find it to be an effective program of professional development for addressing course-level racial equity gaps?

The findings of this study are presented in this chapter following the explanatory sequential procedure, which calls for discussing the findings in the following format: first-phase quantitative phase results to address RQ1; second-phase qualitative phase results to address RQ2 and RQ3, including the description of the themes observed in the

interview data; then a discussion of how the qualitative results expanded on the quantitative results. This means the quantitative survey outcomes are presented first, then the outcomes from the qualitative interviews, and finally how the interview outcomes expanded on the survey results. This allows the sharing of participants' individual stories while in EMTLI, as well as meaningful and accurate quotes about the effects.

Quantitative Survey Results

Research question 1: Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute?

Null hypothesis H01: There will be no significant difference in faculty likelihood of implementing equity-based approaches in the classroom after participating in a year-long EMTLI. An alpha level of .05 was selected for statistical significance.

The findings presented in the first phase of this explanatory sequential design study, the quantitative phase addressing RQ1, were comprised of previously collected survey data from two completed cohorts of EMTLI: spring/fall 2019 and fall/spring 2019–2020. This EMTLI survey data contained nine items assessing the specific classroom behavior of an equity-minded practitioner. This definition was arrived at in Chapter 2 of this dissertation using the literature supporting the four shared components from culturally responsive teaching and culturally relevant pedagogy as identified by Aronson and Laughter (2016)—academic skills and concepts, critical reflections, cultural competence, and critique of discourses of power—and Bensimon's (2018) concept of equity-mindedness:

The outcome data from these nine questions were statistically analyzed via a repeated-measures/within-subjects *t*-test comparison on IBM SPSS for pre- and post-EMTLI survey responses on the 4-point Likert scale survey items to determine whether faculty were more likely to implement specific equity-minded practices in their courses after participating in the EMTLI. This provided insight into RQ1, the quantitative research question guiding this study, and its associated null hypothesis, H01. EMTLI survey data also included verbatim participant responses detailing insights gained and areas of improvement self-identified during EMTLI. This data is also presented in this chapter to ensure all data is included and enable a robust discussion of the research questions guiding this study.

Quantitative Descriptive Statistics

To analyze the data results stemming from the nine 4-point Likert scale items in the EMTLI participant surveys, I first ran descriptive statistics for participant scores. Table 8 displays the number of pre and post surveys, the means, standard deviation of the scores, and the standard error mean for each 4-point Likert scale survey response. The *N* column in Table 8 needs clarification, because there is a variance between the pre and post survey. The variance in pre (N = 40) and post (N = 29) survey responses reflects the eleven EMTLI participants who completed presurveys but not postsurveys. Of these eleven participants, eight dropped out from EMTLI prior to completing and three completed EMTLI but not a postsurvey. With no identifiers available in the survey data provided from the Office of IESE, there was no way to match pre and post surveys to remedy the variance.

Table 8

Group Statistics

Question	Pre /	N	Mean	SD	Std. error mean
	Post				
Q1_1. Develop personal relationships with		40	3.25	0.809	0.128
students by learning about their academic goals	Post	29	3.83	0.384	0.071
Q1_2. Contact students who stop attending	Pre	40	2.93	0.917	0.145
	Post	29	3.83	0.384	0.071
Q1 3. Contact students whose grades suddenly	Pre	39	2.90	0.821	0.131
drop	Post	29	3.90	0.310	0.058
Q1 4. Communicate high expectations of students	Pre	39	3.36	0.668	0.107
regarding their intellectual capability to succeed in college	Post	29	3.93	0.258	0.048
Q1 5. Provide students with feedback on	Pre	40	2.68	0.829	0.131
assignments before they submit them for grades	Post	29	3.31	0.604	0.112
Q1_6. Refer students to on-campus support		40	3.15	0.834	0.132
services when they are struggling	Post	28	3.89	0.315	0.060
Q1_7. Communicate to students that their		40	3.63	0.586	0.093
perspectives are valued in class	Post	29	3.93	0.258	0.048
Q1 8. Challenge students to apply what they learn		40	3.15	0.802	0.127
in class to their daily lives	Post	29	3.72	0.455	0.084
Q1 9. Use examples that are relevant to the daily		40	3.23	0.660	0.104
lives of students with diverse backgrounds and experiences		29	3.86	0.351	0.065

To determine whether there was a statistically significant difference between the mean scores for the nine survey responses on the 4-point Likert scale survey items for pre (N = 40) and post (N = 29) EMTLI surveys, I conducted a repeated-measures/within-subjects *t*-test. The results of the IBM SPSS repeated-measures/within-subjects *t*-test comparison directly address RQ1 and are shown in Table 9. In checking for assumptions, the results of Levene's test for equality of variances indicated the variance of the two populations was not assumed to be approximately equal because all nine significance values were less than .05. I expected this because it reflects the variance in pre (N = 40)

and post (N = 29) survey responses, resulting from 11 EMTLI participants completing

presurveys but not postsurveys. An alpha level of .05 was selected for statistical

significance in this study.

Analysis of Quantitative Survey Results

Table 9

Independent Sample Test

		Levene's Equality of '		t-test for Equality of Means	t-test for Equality of Means					
		F Sig.	Sig	t	df	Sig.(2-tailed)	Mean	Std. Error	95% Confidence Interval of the Difference	
			· ·	ui		Difference	Difference	Lower	Upper	
Q1_1. Develop personal relationships with students by learning about their academic goals	Equal variance assumed	18.892	.000	-3.561	67	.001	578	.162	901	254
	Equal variance not assumed			-3.944	59.106	.000	578	.146	871	285
Q1_2. Contact students	Equal variance assumed	29.918	.000	-4.986	67	.000	903	.181	-1.264	541
who stop attending	Equal variance not assumed			-5.586	55.653	.000	903	.162	-1.226	579
Q1_3. Contact students	Equal variance assumed	21.839	.000	-6.225	66	.000	999	.161	-1.320	679
whose grades suddenly drop	Equal variance not assumed			-6.965	51.41	.000	999	.143	-1.287	711
Q1_4. Communicate high expectations of students	Equal variance assumed	50.098	.000	-4.367	66	.000	572	.131	834	311
regarding their intellectual capability to succeed in college	Equal variance not assumed			-4.879	51.915	.000	572	.117	807	337
Q1_5. Provide students with feedback on assignments before they submit those assignments for grades	Equal variance assumed	4.241	.043	-3.506	67	.001	635	.181	997	274
	Equal variance not assumed			-3.685	66.994	.000	635	.172	980	291
Q1_6. Refer students to on- campus support services when they are struggling	Equal variance assumed	25.307	.000	-4.488	66	.000	743	.166	-1.073	412
	Equal variance not assumed			-5.137	53.327	.000	743	.145	-1.033	453
Q1_7. Communicate to students that their perspectives are valued in class	Equal variance assumed	35.675	.000	-2.631	67	.011	306	.116	583	074
	Equal variance not assumed			-2.936	56.975	.005	306	.104	515	097
Q1_8. Challenge students to apply what they learn in class to their daily lives	Equal variance assumed	6.374	.014	-3.467	67	.001	574	.166	905	244
	Equal variance not assumed			-3.767	63.786	.000	574	.152	879	270
Q1_9. Use examples that are relevant to the daily lives of students with	Equal variance assumed	14.915	.000	-4.731	67	.000	637	.135	906	368
diverse backgrounds and experiences	Equal variance not assumed			-5.180	62.188	.000	637	.123	883	391

The quantitative outcomes on Table 9 reflect the IBM SPSS repeated-

measures/within-subjects *t*-test results for each of the nine individual survey responses on the 4-point Likert scale for pre (N = 40) and post (N = 29) EMTLI survey items specifically focused on equity-based classroom practices by faculty participating in EMTLI.

Survey Question 1_1. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_1, *Develop personal relationships with students by learning about their academic goals*. There was a significant difference in the scores for pre (M = 3.25, SD = 0.384) and post (M = 3.83, SD = 0.384) surveys on developing personal relationships with students by learning about their academic solution by learning about their academic solution (M = 3.83, SD = 0.384) surveys on developing personal relationships with students by learning about their academic goals; t(59) = -4, p < 0.001. These results suggest that faculty who participated in EMTLI will increasingly develop personal relationships with students by learning about their academic goals.

Survey Question 1_2. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre-and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_2, *Contact students who stop attending*. There was a significant difference in the scores for pre (M = 2.93, SD = 0.917) and post (M = 3.83, SD = 0.384) surveys on contacting students who stop attending; t(56) = -6, p < 0.001. These results suggest that faculty who participated in EMTLI will increasingly contact students who stop attending class.

Survey Question 1_3. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_3, *Contact students who suddenly drop*. There

was a significant difference in the scores for pre (M = 2.90, SD = 0.821) and post (M = 3.90, SD = 0.310) surveys on contacting students who suddenly drop; t(51) = -7, p < 0.001. These results suggest that faculty who participated in EMTLI will increasingly contact students who suddenly drop from class.

Survey Question 1_4. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_4, *Communicate high expectations of students regarding their intellectual capability to succeed in college*. There was a significant difference in the scores for pre (M = 3.36, SD = 0.668) and post (M = 3.93, SD = 0.258) surveys on communicating high expectations of students regarding their intellectual capability to success in college; t(52) = -5, p < 0.001. These results suggest that faculty who participated in EMTLI will increase their communication of high expectations for students regarding their intellectual capability to succeed in college.

Survey Question 1_5. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_5, *Provide students with feedback on assignments before they submit those assignments for grades*. There was a significant difference in the scores for pre (M = 2.68, SD = 0.829) and post (M = 3.31, SD = 0.604) surveys on providing students with feedback on assignments before they submit those assignments for grades; t(67) = -7, p < 0.001. These results suggest that faculty who participated in EMTLI will increasingly provide students with feedback on assignments before they submit those assignments for grades. Survey Question 1_6. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_6, *Refer students to on-campus support services when they are struggling.* There was a significant difference in the scores for pre (M = 3.15, SD = 0.834) and post (M = 3.89, SD = 0.315) surveys on referring students to on-campus support services when they are struggling; t(53) = -5, p < 0.001. These results suggest that faculty who participated in EMTLI will increasingly refer students to on-campus support services when they are struggling.

Survey Question 1_7. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_7, *Communicate to students that their perspectives are valued in class*. There was a significant difference in the scores for pre (M = 3.63, SD = 0.586) and post (M = 3.93, SD = 0.258) surveys on communicating to students that their perspectives are valued in class; t(57) = -3, p < .005. These results suggest that faculty who participated in EMTLI will increasingly communicate to students that their perspectives are valued in class.

Survey Question 1_8. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_8, *Challenge students to apply what they learn in class to their daily lives*. There was a significant difference in the scores for pre (M = 3.15, SD = 0.802) and post (M = 3.72, SD = 0.455) surveys on challenging students to apply what they learn in class to their daily lives; *t*(64) = -4, *p* < 0.001. These results

suggest that faculty who participated in EMTLI will increasingly challenge students to apply what they learn in class to their daily lives.

Survey Question 1_9. A repeated-measures/within-subjects *t*-test comparison was conducted to compare pre- and post-EMTLI participant responses on the 4-point Likert scale to EMTLI survey item Q1_9, *Use examples that are relevant to the daily lives of students with diverse backgrounds and experiences*. There was a significant difference in the scores for pre (M = 3.23, SD = 0.660) and post (M = 3.86, SD = 0.351) surveys on using examples that are relevant to the daily lives of students with diverse backgrounds and experiences. These results suggest faculty who participated in EMTLI will increasingly use examples that are relevant to the daily lives of students with diverse backgrounds and experiences.

Cumulative Repeated-measures/Within-subjects Results

These repeated-measures/within-subjects *t*-test results for the nine survey responses on the 4-point Likert scale for the pre (N = 40) and post (N = 29) EMTLI surveys suggest that faculty are more likely to implement equity-based approaches in the classroom after participating in a year-long EMTLI. These results directly address the research question guiding the quantitative phase of this mixed-methods explanatory sequential design study, RQ1: Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute? Additionally, these repeated-measures/within-subjects *t*-test results also show that all nine significance levels (p) were at or less than 0.005, which is below the alpha level ($p \le .05$) set for this study. As a result, the null hypothesis is rejected.

Informing the Qualitative Phase

This data analysis stemming from the quantitative phase directly informed the qualitative phase of this explanatory sequential design study because on its own it was insufficient to fully examine faculty participation in the EMTLI. There is insufficient data in the quantitative phase, including all the added data stemming from the EMTLI surveys, to arrive at a data-driven conclusion on whether participating faculty demonstrated increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations because of their participation in EMTLI or whether they found EMTLI to be an effective program of professional development for addressing course-level racial equity gaps. As a result, I developed eight interview questions to add to the quantitative phase that would help directly address these two research questions and drive the interviews in the qualitative phase of this study.

Additional Survey Data

The research question (RQ1) guiding the quantitative phase of this study was addressed via statistical analysis of pre and post survey EMTLI participant responses on the 4-point Likert scale. There were additional results from survey questions that highlight insights gained by faculty who participated in EMTLIs. This additional data is important to review because it shows participating faculty's self-reported insights and improvements that tie into the ideas, concepts, and methods within the redefined approach of equity-minded I implemented for this study. This redefined concept of equity-minded stems from the definitions of the four shared components from culturally relevant pedagogy and culturally responsive teaching identified by Aronson and Laughter (2016)—academic skills and concepts, critical reflections, cultural competence, and

critique of discourses of power—the addition to the community cultural wealth model provided by Yosso (2005) and the original concept of equity-minded provided by Bensimon (2018). All of these stem from CRT. To provide a true sense of these selfreported insights and improvements from faculty who participated in EMTLI, the responses are provided in Table 10 under these components, as discussed in Chapter 2 of this study.

Table 10

Academic skills and	Critical reflections	Cultural competence	Critique of discourses of
concepts			power
[teaching and th learning] strategies sp were probably my co	e interconnectedness of ne mental, emotional, piritual, and physical omponents in the lassroom.	That race and ethnicity matter in our education setting.	How the master plan helped segregate California students and pushed students of color into the CCC system, the lowest- funded, per-student education system in the state.

Additional EMTLI Survey Data

Academic skills and concepts	Critical reflections	Cultural competence	Critique of discourses of power
That I need to be very intentional about building relationships with students, and that relationships go both ways.	That it is okay to be vulnerable and "human," that it is okay to give up power. That being vulnerable and sharing power creates a better class dynamic and allows you to create meaningful relationships with students.	To give more room for students to have their own voice.	When I started looking at my assessments with a CRTL eye, it made me realize that my disciplines' student learning outcomes (SLO's) did not reflect what I wanted my students to be able to do, to think about how power operates, to think about how history relates to their lives, to question sources of information and the biases of those who created it, and to create an argument and support it with evidence. I have shared this with my colleagues and now the department is going to change SLOs for all of our courses.
The most important insight I gained during this process was the revision of my syllabi and how I grade my students. Before, my syllabi were shaped around a European model that was not accommodating to an Indigenous student body. Bruce was most helpful in this process!	I really started to understand how institutional racism works and how what we have been taught really does cater to White people. I am looking forward to unlearning a history of education and building a new way of teaching students.	Draw from the students' knowledge and the skills they bring to our classes	Questioning and challenging the status quo.
Sharing power with students.	To make my syllabus and my tone be more welcoming.	Reflecting on practices and materials from the student viewpoint.	Engaging in continuous improvement by making changes and assessing those changes.

Academic skills and concepts	Critical reflections	Cultural competence	Critique of discourses of power
Humanizing instruction to increase student engagement in online and face-to-face classes creating a welcoming environment.	Inequities at our institution	The diversity of our students, diverse forms of learning, and students' needs.	Analyzing the impact institutional racism has on higher education.
Demonstrating care.	Engaging in self- reflection to identify weaknesses/flaws in instructional practices.	Ensuring equity is at the center and serves as a framework for everything instructors do.	Analyzing the impact meritocracy has on higher education.
Supporting students.	Analyze data to identify opportunities to improve teaching.	Connecting with students.	
Create equity-minded course materials and artifacts, like syllabi, assessments, and grading techniques.	Reflecting on the asset's students bring to the classroom.	Being flexible with students.	
Build meaningful relationships with students.		Learn about students' community cultural wealth and incorporate students' community cultural wealth in classes.	
		Creating materials that are more accessible.	
		Community cultural wealth model, including recognizing and validating students' assets.	
		Understand community cultural wealth.	
		Reflecting on culturally responsive teaching and learning strategies (CRTL).	

Qualitative Interview Results

Research question 2: Do faculty demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute?

Research question 3: Do faculty who participated in a year-long Equity-Minded Teaching and Learning Institute find it to be an effective program of professional development for addressing course-level racial equity gaps?

The findings presented in the second phase of this explanatory sequential design study, the qualitative phase addressing RQ2 and RQ3, are comprised of the themes and secondary themes observed through the 11 EMTLI interviews I conducted. These interviews were with participants who completed EMTLI in either spring/fall 2019 or fall/spring 2019–2020 and met the selection criteria. For the EMTLI participant interview data collected, I followed the five-step qualitative data analysis process outlined by Creswell and Creswell (2018). This process called for me to adhere to the following five steps: (a) organize and prepare the data for analysis, (b) read or look at all the data, (c) start coding all the data, (d) generate a description and themes, and (e) represent the description and themes (Creswell & Creswell, 2018). Each of the 11 transcript files received a pseudonym in the form of a capital letter ranging from O to Z. This designated capital letter was also placed in the transcript to replace the participant's name for all responses to interview questions to protect confidentiality. These interview transcripts were incorporated in the qualitative data analysis software NVivo, and each was systematically organized, coded, and annotated by me.

Analysis of Qualitative Interview Data

This qualitative interview analysis resulted in 15 codes that were grouped into themes and secondary themes and assigned as either expected themes, surprising themes, or unusual themes; descriptions were generated for each identified theme. This theme grouping was based on the goals of the EMTLI, because these goals guided the content of EMTLI and could be expected when interviewing program completers. The EMTLI goals were the following:

- Assist participating faculty in the use of their racially disaggregated course level data to identify strengths and weaknesses in their teaching practice, better understand their equity data stories, and also set goals to achieve more equitable outcomes in their classes.
- Facilitate an understanding of the national and local history of race and racism, Whiteness in institutions, racial oppression, and the system of meritocracy, specifically their impact on higher education and classroom culture.
- Support implementation of classroom and curricular changes based on CRT approaches: culturally relevant, culturally responsive, and community cultural wealth approaches, plus assess interventions to engage in a cycle of continuous improvement.

Eight themes and five secondary themes emerged from the qualitative (interview) phase of this study. Based on the goals of EMTLI, I classified as them as expected themes. These eight expected themes are the following:

 a heightened awareness of deficit-minded perceptions of students from historically racially marginalized communities,

- improved perceptions of students from historically racially marginalized communities,
- 3. identifying and understanding community cultural wealth,
- 4. a desire to improve teaching practice,
- 5. a desire to revise policies and practice,
- 6. changing of faculty teaching philosophy,
- 7. a desire to eliminate racial equity gaps in classroom outcomes, and
- 8. learning the history of racism in higher education.

These five expected secondary themes are the following:

- 1. identified the EMTLI facilitators as effective,
- 2. gained awareness of power dynamics in the classroom,
- 3. awareness of duplicating traditional Eurocentric instruction,
- 4. were able to identify the culture of Whiteness in academia, and
- 5. the importance of speaking to the issues of race in higher education.
 - Two surprising themes emerged from the qualitative (interview) phase of this

study. Those two surprising themes are the following:

- 1. EMTLI as an effective program of professional development and
- 2. EMTLI a necessary program of professional development.

I identified no unusual themes emerging from the qualitative (interview) phase of this study.

The first quantitative findings reviewed and discussed are the three expected themes emerging from the interviews that directly address RQ2: *A heightened awareness of deficit-minded perceptions of students, Improved perceptions of students from* *historically racially marginalized communities*, and *Identifying and understanding community cultural wealth*. This is followed by a review of the surprising theme that directly addresses RQ3: *EMTLI as an effective program of professional development*. Following this is a review of the remaining five expected themes emerging from the interviews, with supporting quotes, and the five expected secondary themes.

Expected Theme 1. The first expected theme is *A heightened awareness of deficit-minded perceptions of students*. Of the 11 faculty interviewed, nine (O, P, R, T, U, W, X, Y, Z) stated that participation in EMTLI increased awareness of their own deficit-minded perceptions of students from historically racially marginalized communities. This newly gained awareness discussed by the interviewees was mentioned as additional to insights they had about deficit-mindedness before participating in EMTLI. Despite that being the case, there was still a good amount of acknowledgement by interviewees of insights newly gained via EMTLI. R shared:

As an instructor, I might have viewed them initially as, you know, kind of like from a victim standpoint as victims of these historical processes that you know, disenfranchised them, put them in systems of intergenerational poverty and systemic racism on equal access. But I can see now how that is a bit problematic, right, and that thinking while not completely inaccurate can kind of lead you into deficit-mindedness.

In essence, it seems the EMTLI process challenged the standing perceptions of faculty on students from historically racially marginalized communities, even when they didn't think they were deficit minded, as Z shared:

I didn't really think about it in terms of deficit-minded thinking or that I was blaming the students. I didn't make those connections. And so, my thinking really fell along the lines of, sort of the under underserved and under prepared, you know, kind of how we talk about students.

Expected Theme 2. The second expected theme is *Improved perceptions of students from historically racially marginalized communities.* Of the 11 faculty interviewed, eight (O, P, R, T, V, W, X, Y) shared that participation in EMTLI improved their perceptions of students from historically racially marginalized communities. From my perspective, this expected theme seemed to be an uncomfortable topic for most interviewees to speak about. This makes sense, because it required both a high level of awareness of their own unintentional deficit-minded perceptions of students from historically racially marginalized communities and a sense of humility to admit this in their interview. This self-awareness and humility is best encapsulated by W's statement:

I've been hemming and hawing on this question for a long time because I don't know how to answer this question and I'm being honest. And mainly because for me, I don't believe that my perception of these students was any different. But it did change my perception. Yeah, it definitely changed my perception.

This thought was reinforced by the following comment from R:

My shift was from seeing them as being victims of historical processes to seeing them as resilient, you know, students and that skills that they already possess are rich educational resources. And I can still acknowledge the historical process that has impacted students, but my energy as an instructor should really be on drawing

out that resilience and um, and then, you know, figuring out ways to best support them.

Additionally, O made the following comment:

It made me so much more aware of their challenges and their struggles to connect and then my relationship to that. So, um, I feel like I have a better understanding of like why they might not be participating, and you know why there might not be a connection.

These findings tend to show faculty genuinely seeing themselves as equitable in their perceptions of students from historically racially marginalized communities, but through the EMTLI process it seems they gained further awareness of how their idea of being equitable might need some adjusting. This theme was also an area where interviewees mentioned still wanting more content on the topic. As T shared:

I have a better understanding of where they come from. But I still need to learn more. I feel like I have only the basics, you know, and I'm looking for more information and asking for more information and reading and watching videos and because I want to learn more about them.

Expected Theme 3. The third expected theme is *Identifying and understanding community cultural wealth*. Of the 11 faculty interviewed, seven (Q, P, R, U, V, W, Z) stated that participation in EMTLI increased their ability to identify and understand the community cultural wealth of students in their classrooms. This expected theme emerging from faculty interviews speaks to the community cultural wealth that students of color bring with them to college. This community cultural wealth is captured by six types of

capital developed by Yosso (2005): aspirational, linguistic, familial, social, navigational, and resistant. An example of this newfound ability was shared by R:

I should be focusing on my students less from the disadvantages that they face and more from the assets they already have and the resilience that they have as students from navigating these structural oppressions. And so EMTLI, I think helped me to shift my focus and see the students as having capital already and having assets and it was my job, you know, to help them bring those skills into the classroom and recognize those skills as being legitimate in an educational setting. In a similar thought, P added:

You know, they can come with struggles, but there's also like beauty, in the culture, their strength, and then that you know if you have their voices be heard, or that you're coming from building a trust a place of trust.

Additionally, Q mentioned:

In terms of being able to best serve them and understand, you know, like where they're coming from and why they're here, right, and how that plays a role into things and the challenges that they face, not just going to the community college, but also just living in San Diego.

There was definitely a connection made between community cultural wealth and classroom instruction. As U shared:

EMTLI made me realize that teaching includes incorporating more of students' backgrounds, you know, or their background knowledge and the value of doing that. So, I'm more intentional about learning about my students so that I can

connect you know, whatever I'm teaching to whatever it is that my students are interested in whatever knowledge they have.

V mentioned the following:

It was very crucial just to keep that in my mind to make sure that I that I'm servicing them in the best way and acknowledging their background as well, to be able to incorporate that into my lectures, you know, acknowledging that how important it is for us to value the background of our students, you know, and that value also the information that they have the history that they bring to the table.

Z added: "We also needed to really focus on um, you know the agency right, of ordinary people and how they are responding right, that they're not just passive victims of these terrible things that we've been talking about."

It is important to pause to highlight these three expected themes emerging from the interviews (*A heightened awareness of deficit-minded perceptions of students*, *Improved perceptions of students from historically racially marginalized communities*, and *Identifying and understanding community cultural wealth*), because they directly address RQ2. In addressing the qualitative second research question it could be suggested from these interview responses and the three identified expected themes that faculty do demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute.

Surprising Theme 1. The first surprising theme is *EMTLI as an effective program of professional development*. All 11 faculty interviewed stated that they found EMTLI to be an effective program of professional development. This was a surprising

theme emerging from the faculty interviews because there was unanimous support from interviewees and no major critiques or concerns about the approach, content, process, or facilitation of the EMTLI. The interviewees highlighted why they found EMTLI to be an effective program of professional development, such as approach, content, process, facilitation, and timeline. This could be seen in the comments shared by interviewees. R mentioned:

I think that EMTLI is really effective in that it gets you to really self-interrogate and reflect on your own practices as an instructor, whether or not they're actually, you know, serving your students and helping them to be successful.

Z shared:

So yes, I definitely think it's an effective program. Um, I think one of the biggest reasons that it's effective is because, again, it really allows you the space and time to think about what it is that you're doing and why are you doing it. And that's not really something that that instructors have a lot of ability to do. And I've been to lots of professional trainings and you know, workshops and things like that, they last for an hour or two or three or whatever, and you mostly listen to people talk and then you're supposed to take these great ideas that you found or whatever that have been shared with you and go off right and make your stuff.

P shared:

I think it is. I especially like the setup of starting out with the history and then like the speakers we heard from. And I think, you know, depending on the instructor different things that they might want to borrow or, you know, based on our

personality types. I'm a big feeler, so, anything that's very, you know, let's talk feelings and stuff like that.

O shared:

Oh, absolutely it was. Um, so what I like about it. Um, it's not the you know typical for professional development. We usually do a single workshop or something so, I really liked that it was on going and I liked the connection with the other teachers.

T shared:

I mean, it was for me. I mean it makes participants face reality that has existed in this country and any many others as well. In and accept reality that people are not willing to see because it is just like the normal in our society.

Y shared:

Yes, I believe it is an effective program of professional development. I think it was an excellent program, and I think it is an effective program because many instructors will be more aware of the needs of all their students, especially those students who come from marginalized communities.

As with the three expected themes, it is important to pause to highlight this surprising theme emerging from the interviews (*EMTLI as an effective program of professional development*) because it directly addresses RQ3. In addressing the qualitative third research question, it could be suggested from these interview responses within the surprising theme that faculty who participated in a year-long Equity-Minded Teaching and Learning Institute did find it to be an effective program of professional development for addressing course-level racial equity gaps.

With research questions RQ2 and RQ3 guiding the qualitative phase of this study and being addressed by these three expected themes and one surprising theme, the rest of this subsection covers the remaining surprising theme, expected themes, and secondary themes that emerged from my interviews with the 11 EMTLI completers.

Surprising Theme 2. The second surprising theme is *EMTLI a necessary program of professional development.* Of the 11 faculty interviewed, seven (Q, O, R, T, V, X, Z) stated that they found EMTLI to be a necessary program of professional development. This is a surprising theme emerging from the faculty interviews because of the insinuation that it is necessary and also a preferred method for facilitating professional development. This is surprising because EMTLI was a year-long program and there were no comments by any interviewees regarding it being too long. On the contrary, it was described by faculty as preferred and necessary despite all professional development in the CCC being completely voluntary and mostly one-time efforts. A good example of this necessity is highlighted in this comment by R:

I think everybody should have some type of training in being equity minded, because even I think one of the biggest takeaways that I got from the EMTLI is that you can be, you know, a good professor and still be you know, replicating practices in your in your classroom that are not equitable. As diversity and equity are not the same thing, you know.

It was also supported in this comment from V: "As a faculty member, I wish it was mandatory for everyone. And I say this because sometimes you know, when we have the option of doing something we don't." Q reinforced it with the following comment:

These kinds of things are needed. I mean, I can't you know, I can't speak to how other teachers are doing things, but just from, you know, the optics, from what I see you know there's not a whole lot of reflection of the diverse student body in the teachers. So that in itself, I think, you know, should be factored in.

Additionally, O commented on how professional development should be executed in sharing the following:

The challenge of looking at your own data as a starting point that's really helpful. Um, I just feel like this is a better and more effective way to do professional development than the way that we've been doing it.

Expected Theme 4. The fourth expected theme is *A desire to improve teaching practice*. All 11 faculty interviewed stated that they had a desire to improve their teaching practice. This expected theme emerging from faculty interviews details the motivation of faculty to participate in EMTLI in the first place. Their desire to improve teaching practices was at the core of faculty willingness to participate in a year-long program of professional development. This genuine desire to improve upon their teaching practice was highlighted in all the interview responses. The following comments from interviewees highlight this. Z shared:

I was not happy with the success rates [classroom outcomes] that I had and for some demographics [students of color] in particular. And so, I wanted to really you know, figure out what I could do to change you know my practices in the classroom.

R shared:

When I heard about EMTLI, I was just starting my first semester at the college as an instructor, but while in graduate school I had history as a [teaching assistant], but this was really my first semester actually being an official instructor of record. So, when this opportunity for EMTLI came up, I was really motivated to participate because I wanted to be an effective instructor.

U shared:

I was excited about EMTLI, but to take us back when I was in grad school I was focused on educational inequality. So, I've done a lot of research and my dissertation included a lot of stuff about equity. So, I knew like the theoretical or you know, research stuff, but I didn't feel like I really fully understood how to translate that into practice. As you go to grad school and you learn the books, but you don't learn the practice and so I was just feeling, you know, like I wasn't translating what I wanted to into my practice and so EMTLI seemed like a good way to get a lot of strategies.

Expected Theme 5. The fifth expected theme is *A desire to revise policies and practice*. All 11 faculty interviewed stated a desire to revise policies and practices based on their participation in EMTLI. This expected theme emerging from the faculty interviews details a key outcome that is one of the goals of EMTLI. As such, this expected theme directly supports concluding that participation in EMTLI results in faculty revising their policies and practice to improve upon classroom outcomes. The following comments share some of the interviewees' insights in relation to this expected theme. Z shared:

I've been teaching for 9 years now and so, I realized that you know, all of these things weren't necessarily changed overnight. Because of the EMTLI, it allowed me to really think about it and say "Why. Why do I have this policy? Do I need this policy? Is this really, again, going back to the learning outcomes?" Going back to rethinking you know the culture of higher ed, and the culture of myself and the culture of my students, and how much of that policy and practices really informed by the culture of higher ed.

X shared:

I think the biggest one is just being more understanding. Right, so practicing more empathy and hearing them out right. I'm really trying to hear them and hear what is happening versus like nope, sorry. You know, it is what it is, I have 200 other papers to grade, but, you know, so really trying just to be more relational.

W shared:

I'm also going to be utilizing the students in my first class session to ask them whether they think these policies are fair or there are some changes they would like to see. Is there something that they feel they would like to see changed, I guess, is what I'm thinking. So, when I'm thinking about these policies, I'm really trying to think about it from the perceptions of the students and how I can make the policies not deficit oriented that the policies feel growth oriented to help. My whole point in these policies is to help the students grow.

Expected Theme 6. The sixth expected theme is *Changing of faculty teaching philosophy*. Of the 11 faculty interviewed, eight (Q, O, R, T, V, X, Y, Z) stated that they wanted to change their teaching philosophy because participation in EMTLI. This

expected theme emerging from the faculty interviews highlights another key outcome that is also one of the goals of the EMTLI. To create change to pedagogy and practice, the instructor's teaching philosophy needs to be revisited. The following interviewee statements provide some insight into these changes. R said, "I think it impacted it tremendously. I think that, you know, I definitely was accustomed to a very traditional education. You know sage-on-the-stage style of instructing before this." O said:

Oh, absolutely. It did. Yeah, and I think before I had a sort of hands off, sort of these are adults and so I don't need to think too much about students who dropped, you know they maybe just don't like the subject matter. And that might be true, still, right. Um, and you know my philosophy was kind of like I'll go out of my way to help people, but they have to ask, it was kind of like that. Um, and I see much more meaning and also consequence in all of the little things that you do in a class.

V shared:

I should not be using like a cookie cutter for to serve my students. I'm not acknowledging the backgrounds and their personalities. I need to acknowledge the human beings that they are and that they have different ways of learning and my responsibility as a facilitator is to make sure that I facilitate that.

Expected Theme 7. The seventh expected theme is *A desire to eliminate racial equity gaps in classroom outcomes*. Of the 11 faculty interviewed, seven (O, R, T, V, W, X, Z) mentioned a desire to eliminate racial equity gaps in their classroom outcomes as a reason to participate in the EMTLI. This expected theme emerging from faculty interviews speaks to faculty having some knowledge of their own racial equity gaps in

classroom outcomes and having a genuine desire to eliminate them, but not having an intentional approach to do this effectively. The following comments from interviewees provide some insight into this expected theme. Z said:

I was really interested in participating in EMTLI because I had equity gaps and I started really looking at my equity gaps and trying to figure out what I could do to improve my courses and to improve the success rate know of the students in my courses.

O shared:

I knew that I had equity gaps and I you know also became more aware of success and with success and retention rates that were way lower than I expected. And so, I wanted to reduce the equity gaps in particular for me and for my class.

W shared:

The whole equity imperative has been something that's very important to me for many years. Seeing and understanding the equity implications in the success of students getting through college and students of color in particular. You know it's been something that's been very close to my heart for a while. And so, part of what I am doing is just trying to learn as much as I possibly can about people of color, their plight in general, their history and also where that how I can help them succeed.

Expected Theme 8. The eighth expected theme is *Learning the history of racism in higher education*. Of the 11 faculty interviewed, six (O, P, T, U, W, X) stated that they gained important insights into the history of racism in higher education during EMTLI. This expected theme emerging from the faculty interviews speaks to another goal of the

EMTLI, reviewing the history of racism in higher education, including the California master plan. This is an important process during EMTLI because it provides context to participants about why and how they arrived at racial inequities in classroom outcomes and creates a reason for change. The interviewees shared the benefits of gaining this historical knowledge in relation to the racism that has existed and still exists in higher education. O shared:

Starting off by looking at the laws and all of the ways that racism is part of the system and I you know, I knew that, but it really hit home. I think in a different way. And, um, and it made me more aware. I mean, it's not like I was unaware, but it made me more aware of that. There's they're still there, that's still here, like it didn't go away with the civil rights movement. You know what I mean. So, I think the hardest part was realizing, oh wait, there are things that I'm doing that are that are contributing. And so, you know, that's the part that I'm grappling with right now is just that notion.

U shared:

I kind of would notice more in general, maybe apprehension amongst some of the students especially compared to a lot of my White students. Now this is my interpretation, you know feel a little bit more, I don't want this to sound as critical as it is, but feeling more entitled to the space, if that makes sense.

X shared:

When we talked about the history right and we started talking about the history of Community College. I didn't ever know that right. Now knowing what I know, I'm like, yeah, you should totally go to community college first, like go there first. So even just how I view community college as a whole is different.

Expected Secondary Theme 1. The first expected secondary theme is *Identified the EMTLI facilitators as effective.* Of the 11 faculty interviewed, nine (Q, O, P, R, U, V, W, X, Z) stated that they found the facilitation in EMTLI to be effective. This expected theme emerging from faculty interviews is in relation to the Office of IESE team who developed, coordinated, and implemented EMTLI: campus researcher Katie Cabral; student success and equity faculty coordinator Moriah Gonzalez-Meeks; myself, student success and equity dean Jesús Miranda; and the guest EMTLI session facilitators who speak to specific content during the program. These guest facilitators were Fabiola Torres (Ethnic Studies faculty member at Glendale Community College), Bruce Hoskins (Sociology faculty member at Mira Costa Community College), and cofacilitators Deanna Cherry and Ricardo Vidal (R&D Consulting, Inc.).

Expected Secondary Theme 2. The second expected secondary theme is *Gained awareness of power dynamics in the classroom.* Of the 11 faculty interviewed, six (O, P, R, U, V, Z) shared that they had gained an awareness of power dynamics in the classroom during their EMTLI experience. This expected theme emerging from faculty interviews highlights the classroom component of power, which in traditional academia means the instructor has control in the classroom. White students also have power because the academic setting is based on the culture of Whiteness. Therefore, gaining an awareness of this power dynamic is critical for EMTLI participants in efforts to then develop changes and as a result create an equitable classroom environment.

Expected Secondary Theme 3. The third expected secondary theme is *Were able to identify the culture of Whiteness in academia.* Of the 11 faculty interviewed, six (O, P, U, W, X, Z) shared that they were able to identify the culture of Whiteness in academia because of their participation in EMTLI. This expected theme emerging from faculty interviews speaks to the standard in academia being the White culture, including at higher education settings such as the CCC. This is another important insight for EMTLI participants to gain because, in order to develop changes and create an equitable classroom environment, this culture must be deconstructed.

Expected Secondary Theme 4: The fourth expected secondary theme is *Awareness of duplicating traditional Eurocentric instruction.* Of the 11 faculty interviewed, seven (Q, R, T, U, V, X, Z) shared that they were able to gain an awareness of duplicating traditional Eurocentric instruction because of their participation in EMTLI. This expected theme emerging from faculty interviews highlights the issue of duplication of Eurocentric instruction by faculty regardless of race. Most faculty, regardless of race, tend to duplicate instruction based on the process they went through in the academy.

Expected Secondary Theme 5: The fifth expected secondary theme **is** *The importance of speaking to the issues of race in higher education.* Of the 11 faculty interviewed, seven (Q, P, T, U, X, Y) shared how EMTLI helped them better understand the importance of speaking to the issues of race in higher education. This expected theme emerging from faculty interviews is important because there is a general lack of understanding in academia of the importance of facilitating class conversations on race as a method to include not only the voices, but also the stories, of people from historically

racially marginalized communities in the classroom to create a more equitable learning environment.

Themes in Redefined Concept of Equity-minded

To show how the eight expected themes and five expected secondary themes emerging from the qualitative (interview) phase of this study fit into my redefined concept of equity-minded, they are presented in Table 11 under the appropriate defined equity-minded component. The two surprising themes emerging from the qualitative (interview) phase of this study focus on the effectiveness and necessity of the program of professional development, the EMTLI; therefore, it is not appropriate to present them in this fashion.

Again, this redefined concept of equity-minded directly stems from the definitions of the four shared components from culturally relevant pedagogy and culturally responsive teaching, identified by Aronson and Laughter (2016)—academic skills and concepts, critical reflections, cultural competence, and critique of discourses of power the addition of the community cultural wealth model provided by Yosso (2005), to expand upon the original concept of equity-minded provided by Bensimon (2018). All stem from CRT.

Table 11

Academic skills and	Critical reflections	Cultural competence	Critique of
concepts			discourses of power
A desire to improve	A heightened awareness of	Identifying and	Awareness of
teaching practice	deficit-minded perceptions	understanding	duplicating
	of students from	community cultural	traditional
	historically racially	wealth	Eurocentric
	marginalized communities		instruction

Academic skills and concepts	Critical reflections	Cultural competence	Critique of discourses of power
A desire to revise policies and practice.	Learning the history of racism in higher ed	Improved perceptions of students from historically racially marginalized communities	Gained awareness of power dynamics in the classroom
Changing of faculty teaching philosophy	Identified the EMTLI facilitators as effective	The importance of speaking to the issues of race in higher ed	Were able to identify the culture of Whiteness in academia
A desire to eliminate racial equity gaps in classroom outcomes			

Researcher Observations

My being a member of the Office of IESE team coordinating the EMTLIs provided me the opportunity to share some additional observations in regard to the results of this study. There are a couple of areas in need of discussion even where there was little data from either the quantitative (survey) phase or the qualitative (interview) phase of this mixed-methods explanatory design study.

The first is that in both phases of this study, there was at least one participant who provided a good amount of feedback on making sessions of the EMTLI process more interactive and less lecture based. While there was not enough data to merit mentioning this in the outcomes, it is important to discuss because this was also an area for improvement identified by the EMTLI coordinators when developing the 2020–2021 EMTLI cohort. The desire would be to implement more modeling of an interactive classroom. Despite there not being much data, I recognize this as an area in need of highlighting.

A second area for discussion, from my perspective, is the issue of absences by faculty during their participation in the EMTLIs. While there was a clear cutoff of attending 10 of 14 (71%) sessions to successfully complete EMTLI, there was definitely a consequence to missing certain information and classroom experiences during EMTLI. As with any teaching or classroom setting, being absent creates gaps in content knowledge, especially when most of the EMTLI sessions are interactive with guest facilitators who provide content-rich sessions. It is important to highlight this area because not every faculty member participating in either phase of this mixed-methods explanatory design study had perfect attendance in EMTLI. Of the 32 EMTLI completers, 10 participants had a perfect attendance of 14 sessions, 18 attended between 11 and 13 sessions, and four attended 10 sessions.

Lastly, prior to Session 11 of the fall/spring 2019–2020 EMTLI cohort, the college where this study took place was forced to move to remote learning because of the COVID-19 pandemic. As a result, the EMTLI coordinators had to shift the program to the Zoom platform for the final four sessions (11-14). While the content remained the same, the modality was much different. Additionally, the college where this mixed-methods explanatory design study took place under remote learning because of the pandemic, so I was forced to conduct and complete this study using remote resources.

Qualitative Data Expanding on Quantitative Data

To ensure this study complies with the Creswell and Creswell (2018) mixedmethods explanatory design, this section details how the qualitative (interview) results expand on the quantitative (survey) results for this study. The quantitative phase was made up of repeated-measures/within-subjects *t*-test results for the nine survey responses

on the 4-point Likert scale for pre (N = 40) and post (N = 29) EMTLI survey. These suggest that faculty are more likely to implement equity-based approaches in the classroom after participating in a year-long EMTLI. These results directly address the research question guiding the quantitative phase of this mixed-methods explanatory sequential design study: Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute? These results also show that all nine significance levels (p) were less than .005, which was below the alpha level ($p \le .05$). As a result, the null hypothesis was rejected.

This data analysis stemming from the quantitative phase directly informed the qualitative phase for this explanatory sequential design study because on its own merit it was insufficient to fully examine faculty participation in the EMTLI. There was no enough data in the quantitative phase, including all the added data stemming from the EMTLI surveys, to arrive at a data-driven conclusion about whether participating faculty demonstrated increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations because of their participation in EMTLI and whether these participants found EMTLI to be an effective program of professional development for addressing course-level racial equity gaps. As a result, I opted to implement interviews and developed eight interview questions (Appendix F) to enhance the quantitative phase outcomes and directly address the two research questions (RQ2 and RQ3) that drove the interviews in the qualitative phase of this study.

The outcomes from the interview data helped address the qualitative second research question in this study. It could be suggested from interview responses within the three identified expected themes (*A heightened awareness of deficit-minded perceptions*

of students from historically racially marginalized communities, Improved perceptions of students from historically racially marginalized communities, and Identifying and understanding community cultural wealth), that faculty do demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute.

The outcomes from the interview data also addressed the qualitative third research question in this study. It could be suggested from interview responses within the surprising theme (*EMTLI as an effective program of professional development*) that faculty who participated in a year-long Equity-Minded Teaching and Learning Institute did find it to be an effective program of professional development for addressing course-level racial equity gaps.

A simpler way to understand how the qualitative (interview) phase results expand on the quantitative (survey) phase results for this study would be to consider the qualitative phase as focused primarily on changing teaching practice, which does not speak to fostering critical reflection by faculty about their pedagogy and perception of students from historically racially marginalized communities. To improve upon teaching and intentionally address racial inequities in classroom outcomes, there must be more than just changes to teaching practice. Therefore, this requires a focus on critical reflection by faculty about their pedagogy and perception of students from historically racially marginalized communities. This then expands upon teaching practice and creates a more holistic and effective approach to eliminating racial inequities in classroom outcomes.

CHAPTER 5: DISCUSSION

Despite the California Community Colleges being the largest and most diverse system of higher education in the United States, serving 2.1 million students, 55% of them from historically racially marginalized communities, it continues to underserve such populations. Inequitable classroom outcomes in the CCC have been persistent and longstanding for students from historically racially marginalized communities (CCCCO, 2020). This points to a much larger issue in this country, as historically racially marginalized communities have experienced long-standing underrepresentation, being underserved, and denied higher education opportunities because of race and racist policies in the United States (Rivera-Lacey, 2016). While the classroom remains the primary point of contact for students, historically instruction in the CCC is vastly underresearched. Existing research tends to focus on issues other than classroom instruction, such as access, engagement, support services, the structure of remedial education, and the students themselves (Zapata, 2019).

This lack of intentionality should not be surprising in a highly politicized setting where most faculty are White and govern over teaching and learning, professional development, and bargaining units. Carrying out effective research on CCC instruction that creates racial disparities in classroom outcomes for students from historically racially marginalized communities requires a focus on race, Whiteness, and racism, as well as challenging the dominant perspective and longstanding systemic inequities within the CCC. These include the lack of diversity within instructional units, an ineffective system of professional development, outdated instruction focused on creating a monocultural and

monolingual society centered on White middle-class norms, and traditional Eurocentric education based on meritocracy and power (Paris, 2012).

As a result, in an effort to contribute to the eradication of classroom inequities for students from historically racially marginalized communities attending the CCC, this study employed a critical race theory lens to implement a mixed-methods explanatory sequential design to examine teacher preparation via a program of professional development, the Equity-Minded Teaching and Learning Institute. This study examined the experiences of classroom faculty (N = 32) who participated and completed one of two EMTLI cohorts in spring/fall 2019 and fall/spring 2019–2020. I was provided pre collected EMTLI survey data from the institution and then ran a repeated-measures/within-subjects *t*-test for nine pre and post survey responses on a 4-point Likert scale, which made up the qualitative phase.

To expand on the qualitative survey outcomes, I conducted interviews (n = 11) with some EMTLI completers. This interview data comprised the qualitative phase of this study. The outcomes were examined to address the following three research questions:

RQ1: Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute?

RQ2: Do faculty demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute?

RQ3: Do faculty who participated in a year-long Equity-Minded Teaching and Learning Institute find it to be an effective program of professional development for addressing course-level racial equity gaps?

Summary of Results

Research Question 1

The first research question is: Are faculty more likely to implement equity-based approaches in the classroom after participating in a year-long Equity-Minded Teaching and Learning Institute? The aim of the study was to use a CRT lens to examine teacher preparation via a program of professional development, the EMTLI. I hypothesized that faculty are more likely to implement equity-based approaches in the classroom after participating in a year-long EMTLI. To examine the potential differences, the quantitative measure used was a pre-existing EMTLI participant survey that contained nine survey items on a 4-point Likert scale for pre and post responses about the likelihood of implementing equity-based approaches in their classrooms. To analyze the data from the nine 4-point Likert scale items in the EMTLI participant surveys, I first ran descriptive statistics for participants' scores. There was a variance between the number of pre and post surveys. The variance in pre (N = 40) and post (N = 29) survey responses reflects the 11 EMTLI participants who completed presurveys but not postsurveys. Of these 11 participants, eight dropped out of EMTLI before completing it and three completed EMTL but not a postsurvey. With no identifiers available in the survey data provided from the Office of IESE, there were no options to remedy this variance. In checking for assumptions, the results of Levene's test for equality of variances indicated the variance of the two populations was not assumed to be approximately equal because

all nine significance values were less than .05. I expected this because it reflects the variance in pre (N = 40) and post (N = 29) survey responses, resulting from 11 EMTLI participants completing presurveys, but not postsurveys. An alpha level of .05 was selected for statistical significance in this study.

The results from repeated-measures/within-subjects *t*-test results for the nine survey responses on the 4-point Likert scale for pre (N = 40) and post (N = 29) EMTLI survey show that all nine significance levels (p) were less than .005, which is below the alpha level ($p \le .05$). These results mean there was a significant increase from pre to post outcomes for each of the nine survey items. This suggests that faculty are more likely to implement equity-based approaches in the classroom after participating in a year-long EMTLI. These outcomes address the research question guiding the quantitative phase of this mixed-methods explanatory sequential design study and led me to reject the null hypothesis. Additionally, these quantitative (survey) outcomes also suggest that EMTLI was successful in meeting one of three program goals: Support implementation of classroom and curricular changes based on CRT approaches—culturally relevant, culturally responsive, and community cultural wealth—and assess interventions to engage in a cycle of continuous improvement.

Research Question 2

The second research question is: Do faculty demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute? The findings presented in this section result from the second phase of this explanatory sequential design study, the qualitative

(interviews) phase that specifically addressed RQ2 and RQ3. These qualitative findings were comprised of themes observed through 11 interviews I conducted with EMTLI completers to expand on the quantitative (surveys) phase outcomes. I needed to add an interview phase to this mixed-methods sequential design study because the quantitative (surveys) phase lacked sufficient data to address whether faculty demonstrate increases in their positive perceptions (community cultural wealth) of students from historically racially marginalized communities due to EMTLI and the overall effectiveness of the EMTLI, the program of professional development at the center of this mixed-methods sequential design study.

I conducted interviews with EMTLI completers who participated in either spring/fall 2019 or fall/spring 2019–2020, met selected criteria, and volunteered to participate. The quantitative findings presented and discussed are the three of eight expected themes that emerged from the interviews and directly address RQ2: *A heightened awareness of deficit-minded perceptions of students, Improved perceptions of students from historically racially marginalized communities*, and *Identifying and understanding community cultural wealth*. Additionally, one of the two identified surprising themes is presented because it directly addresses RQ3: *EMTLI as an effective program of professional development*.

The first expected theme that emerged from the interviews conducted with EMTLI completers was: *A heightened awareness of deficit-minded perceptions of students*. Interviewees shared that participation in EMTLI increased awareness of their own deficit-minded perceptions of students from historically racially marginalized communities. This gained awareness was mentioned by the interviewees as being

additional to previous insights they had learned about deficit-mindedness before participating in EMTLI. Despite this being mentioned as additional, interviewees still acknowledged a significant amount of insights newly gained via EMTLI.

The second expected theme that emerged from the interviews conducted with EMTLI completers was: *Improved perceptions of students from historically racially marginalized communities*. Interviewees mentioned that participation in EMTLI improved their perceptions of students from historically racially marginalized communities. From my perspective, this expected theme seemed to be an uncomfortable topic for most interviewees to speak to, because it required both a high level of awareness of their own unintentional deficit-minded perceptions of students from historically racially marginalized communities and a sense of humility to admit to this in their interview.

The third expected theme that emerged from the interviews conducted with the EMTLI completers was: *Identifying and understanding community cultural wealth*. Interviewees stated that participation in EMTLI increased their ability to identify and understand the community cultural wealth of students in their classrooms. This expected theme that emerged from faculty interviews speaks to the community cultural wealth that students of color bring with them to college. This community cultural wealth is captured by the following six types of capital developed by Yosso (2005): aspirational, linguistic, familial, social, navigational, and resistant.

These three expected themes emerging from the qualitative (interview) phase directly address the qualitative second research question guiding this study: Do faculty demonstrate increases in their positive perceptions (community cultural wealth) of

students from historically racially marginalized populations in the United States after participating in a year-long Equity-Minded Teaching and Learning Institute? The three expected themes emerging from the comments of the 11 EMTLI completers who were interviewed expanded upon how, based on their participation in EMTLI, they were able to gain awareness of their perceptions of students from historically racially marginalized communities and improve upon those perceptions with the assistance of the community cultural wealth model. These qualitative outcomes also suggest EMTLI was successful in meeting one of three program goals: Facilitate an understanding of the national and local history of race and racism, Whiteness in institutions, racial oppression, and the system of meritocracy, specifically their impact on higher education and classroom culture.

Research Question 3

Do faculty who participated in a year-long Equity-Minded Teaching and Learning Institute find it to be an effective program of professional development for addressing course-level racial equity gaps?

One of the surprising themes that emerged from the interviews conducted with the EMTLI completers was: *EMTLI as an effective program of professional development*. The interviewees shared experiences that spoke to why they found EMTLI to be an effective program of professional development for addressing racial equity gaps in classroom outcomes. This surprising theme emerging from the interviews was unanimous and received emphatic support from all interviewees. Interviewees did not provide any major critiques or concerns about the approach, content, process, or facilitation of the EMTLI. Therefore, this surprising theme suggests that EMTLI was an effective program of professional development for addressing course-level racial equity gaps. It also

directly addressed the qualitative second research question: Do faculty who participated in a year-long Equity-Minded Teaching and Learning Institute find it to be an effective program of professional development for addressing course-level racial equity gaps? Based on this result, I conclude that EMTLI is an effective program of professional development for addressing course-level racial equity gaps.

The research question (RQ1) from the qualitative (surveys) phase and the research questions (RQ2 and RQ3) from the qualitative (interviews) phase were directly addressed via survey and interview outcomes in this mixed-methods sequential design study. The outcomes clearly suggest that the EMTLI meets the program goals and as a result, should be considered an effective program of professional development in the CCC.

Relationship Between Results and Prior Research

The work of Aronson and Laughter (2016) highlighted how Gay focused on teaching and primarily sought to influence competency and methods, describing what a teacher should be doing in the classroom to be culturally responsive, while Ladson-Billings focused on pedagogy and primarily sought to influence attitude, academic skills, concepts, and dispositions to describe the posture a teacher might adopt to determine planning, instruction, and assessment. Additionally, Aronson and Laughter (2016) noted the importance of differentiating them, because they focus on two separate but complementary types of outcomes. Teaching affects competence and practice whereas pedagogy affects attitude and disposition; although the focus may differ, both frameworks present visions undergirded by a firm commitment to social justice education and seeing the classroom as a site for social change. This complementary yet separate focus by Ladson-Billings and Gay on teaching and learning, the addition of the

community cultural wealth model provided by Yosso, and the concept of equity-minded provided by Bensimon (2018), all stemming from CRT, were synthesized and used as the guiding framework for the EMTLI. This was implemented for the purpose of fostering changes to faculty perceptions of students from historically racially marginalized communities and implementing pedagogical and teaching changes leading to the elimination of racial inequities in classroom outcomes. This theoretical synthesis also guided me in redefining of the concept of equity-mindedness for this study.

I used this redefined approach to equity-minded to revise the definitions of the four shared components from culturally relevant pedagogy and culturally responsive teaching, identified by Aronson and Laughter (2016): academic skills and concepts, critical reflections, cultural competence, and critique of discourses of power. I presented an updated definition of the equity-minded educator to also include the work of Yosso (2005) and her community cultural wealth model, while also creating a lens to discuss the relationship between the results of this study and prior research. The following subsections review the outcomes of this study as they relate to the redefined approach of equity-minded and the existing literature regarding effective equity-minded teaching and learning approaches with CCC students from historically marginalized and oppressed populations in the United States. Given the lack of existing literature focused on the California Community Colleges, findings from similar settings such as K-12 along with other higher education settings will be brought into the discussion.

Academic Skills and Concepts

The quantitative (surveys) phase outcomes of this study fall under my revised definition of academic skills and concepts within being equity-minded. These outcomes

showed significant increases in nine pre to post items within the EMTLI survey, all of which speak to behaviors from classroom faculty, identified by Guaracha (2017), that foster higher anticipated levels of persistence among students from historically racially marginalized communities. Work by Palkki, (2015) also showed the teacher–student relationship as a primary way in which a student is validated for being themselves. These classroom behaviors are considered a part of the larger culturally relevant pedagogy. Morrison et al. (2008) suggested they are effective in connecting cultural experiences to the content of practice in the classroom and a willingness to adapt and normalize cultural norms that may not be common to the practitioner. Also supported by Kromka et al. (2020) are behaviors in relation to sharing examples. Their work concluded that relevant storytelling by faculty is an effective teaching practice that supports learning only when the instructor can make it relevant to the students' culture, classroom needs, or personal struggles. The nine survey items in the EMTLI survey consist of the following classroom behaviors deemed to be part of being equity-minded:

- develop personal relationships with students by learning about their academic goals,
- 2. contact students who stop attending,
- 3. contact students whose grades suddenly drop,
- 4. communicate high expectations of students regarding their intellectual capability to succeed in college,
- 5. provide students with feedback on assignments before they submit those assignments for grades,
- 6. refer students to on-campus support services when they are struggling,

- 7. communicate to students that their perspectives are valued in class,
- 8. challenge students to apply what they learn in class to their daily lives, and
- use examples that are relevant to the daily lives of students with diverse backgrounds and experiences

Four expected themes emerging from the qualitative (interviews) phase of this explanatory sequential design study fall under academic skills and concepts: *A desire to improve teaching practice*, *A desire to revise policies and practice*, *Changing of faculty teaching philosophy*, and *A desire to eliminate racial equity gaps in classroom outcomes*. These themes focus on the central idea of being equity-minded in practice and approach; they also support using academic skills and concepts via constructivist methods to develop bridges connecting students' cultural references and community cultural wealth to academic skills. This is supported by Zapata (2019), who highlighted the importance of connecting students' lived experiences to classroom instruction, and by N. A. Luna and Martinez (2013), who concluded that to better serve the Latino population, educators need to gain an in-depth understanding of how Latino students are shaped and influenced by their cultural communities.

Critical Reflections

Two expected themes emerging from the qualitative (interviews) phase of this explanatory sequential design study fall under my revised definition of critical reflection: *A heightened awareness of deficit-minded perceptions of students from historically racially marginalized communities* and *Learning the history of racism in higher education.* Additionally, there was a secondary theme: *Identified the EMTLI facilitators as effective.* The secondary theme is placed under this area because it was through the facilitators that much of the EMTLI content and materials was provided. These outcomes are supported by the work of Biggs et al. (2018), who highlighted that community college educators need to practice reflective and critically aware instruction to enable them to address the various ways literacy skills and attitudes develop in postsecondary years. These develop at the intersection of race, gender, initial levels of reading comprehension, and attitude toward literacy activities from the college freshman year and onward. Additionally, Martin (2014) highlighted that changes to curriculum are important for eliminating academic failure among students from historically marginalized and oppressed populations, but curriculum change without critical reflection by educators could do more harm than good. Also, Zapata (2019) concluded that trust-building practices and interactions that are cognizant of students' life context and go above and beyond what is required of educators help create an environment of inclusion and visibility for all students, especially those from marginalized communities. The characteristics identified in effective equity-minded higher education practitioners by Bensimon and Gray (2020) also highlight a genuine personal investment in educating themselves to be aware the experiences of marginalized student populations.

Cultural Competence

Two expected themes emerging from the qualitative (interviews) phase of this explanatory sequential design study fall under my revised definition of cultural competence: *Identifying and understanding community cultural wealth* and *Improved perceptions of students from historically racially marginalized communities*. Additionally, there was one secondary theme: *The importance of speaking to the issues of race in higher education*. These outcomes are supported by the work by Paris (2012), who

asserted that current culturally-based practices do not provide enough explicit support for the linguistic and cultural dexterity and plurality necessary for success and access in demographically changing schools and communities. Additionally, Yosso and Solórzano (2006) recommended a decrease in overreliance on high-stakes, inappropriate testing and assessment, along with training bilingual, multicultural educators to challenge traditional cultural deficit thinking. Morrison et al. (2008) discovered that the most effective curriculum is one that integrates authors of color and nonmainstream content into the traditional curriculum, along with the selection of non-Eurocentric teaching materials and topics. Martin (2014) demonstrated how the chosen practitioner approach is critical to creating effective classroom outcomes and can also help remediate errors in judgment by the practitioner. Bensimon and Gray (2020) identified core qualities found in effective equity-minded practitioners in the higher education setting and pointed out that an effective equity-minded practitioner in higher education will have a concrete understanding of the importance of prioritizing racial equity, not stray away from race in the process, and never allow socioeconomic status to take precedence in either the approach or in defining the reasons for a lack of achievement for students of color.

Critique of Discourse of Power

Three expected secondary themes emerging from the qualitative (interviews) phase of this explanatory sequential design study fall under my revised definition of critique of discourses of power: *Awareness of duplicating traditional Eurocentric instruction*, *Gained awareness of power dynamics in the classroom*, and *Were able to identify the culture of Whiteness in academia*. These outcomes are reinforced by Howard and Navarro (2016), who suggested using curriculum that entails a discourse on race and

institutional racism. They also noted that this would require a practitioner who was wellversed in the topics and in acknowledging their own privilege. Harris and Wood (2014) concluded that an intentional approach is needed to improve educational learning outcomes for men of color, specifically to help counter the overrepresentation of Black and Latino men in the California criminal justice system. Rivera-Lacey (2016) identified a blind awareness of community college institutional practices that negatively impact academic achievement for Latino students. Morrison et al. (2008) highlighted how critical it is to have practitioners in education who genuinely embrace social justice and student equity in implementing teaching and learning methods so students of color can close achievement gaps. This is also echoed by Martin (2014) and Palkki (2015), whose studies focused on teaching students from historically racially marginalized populations in school settings. M. S. Luna (2016) concluded that educational practitioners who understand the world through a social justice lens have the innate ability to teach with methods designed to successfully redistribute cultural capital to students of color. Lastly, Bensimon and Gray (2020) saw the acceptance and understanding of Whiteness as an embedded characteristic in institutional practices and practitioners in higher education as a necessary quality for an effective equity-minded practitioner.

Despite the lack of literature specifically focused on the elimination of inequities in CCC classroom outcomes for students from historically racially marginalized communities, it could still be concluded from the results of this explanatory sequential design and their relationship to prior research focused on equity-minded teaching and learning that efforts from the EMTLI are aligned with and supported by existing literature on CRT approaches in education. This connection is clearly visible with the program's

use of a synthesis of culturally relevant pedagogy by Ladson-Billings (1995), culturally responsive teaching by Gay (2002), the community cultural wealth model by Yosso (2005), and the work of Bensimon (2018), which are the focal point of the EMTLI program. As a result, this explanatory sequential design study has re-envisioned and detailed what it is to be an equity-minded practitioner in a CCC classroom.

Limitations

This explanatory sequential design study has several limitations. First, there was not enough existing literature focused on CRT approaches in the CCC classroom, which created the need to look for related CRT literature on K-12 and universities to fill the void. Second, the timeframe of this study limited my ability to request racially disaggregated data on student outcomes from courses taught by EMTLI completers to additionally measure the effectiveness of EMTLI in the elimination of racial equity gaps in classroom outcomes. This would have required at a minimum a 2-year study to be able to provide program completers sufficient time to implement changes learned via EMTLI in their courses. In addition, there is the matter of variables outside the classroom that intersect with classroom success for students from historically racially marginalized communities, such as socioeconomics; lack of a support system; familial responsibilities; learning disabilities; and undocumented, foster, or first-generation college student status. While these important variables need to be addressed by the CCC to support student success, this study was solely focused on classroom instruction and teacher preparation; as such, I purposely avoided addressing these topics. The small sample size of 32 faculty limited the statistical power of the study, and it may not be generalizable to other teaching faculty outside the CCC. A final limitation was the variance in pre (N = 40) and

post (N = 29) survey responses, which reflected the 11 EMTLI participants who completed presurveys but not postsurveys. Of these 11 participants, eight dropped out of EMTLI before completing and three completed EMTLI but not a postsurvey. With no identifiers available in the survey data provided from the Office of IESE, there were no options for remedying the variance.

Recommendations for Future Research

Given the small sample of research focused on equitable teaching practices within the CCC to help eliminate racial inequities in classroom outcomes for students from historically racially marginalized communities (Bragg & Durham, 2012; Yosso & Solórzano, 2006; Zapata, 2019), there is a definite need for more research in this area. There is also a need to use disaggregated course-level data with CRT-based frameworks in such studies to ensure that effective research on disparities in CCC classroom outcomes for students from historically racially marginalized communities takes place. This requires a central focus on race, Whiteness, racism, and challenging the dominant perspective and longstanding systemic inequities within the CCC. Additionally, the current system of professional development in the CCC should be a point of future research. This system has long failed to meet the needs of CCC faculty in efforts to eliminate racial disparities in classroom outcomes and there is no accountability built into it to ensure faculty participate in professional development based on their course-level racially disaggregated data for classroom outcomes. Last, further research should include replicating this study in the CCCs to help create effective programs of professional development that improve instruction and help eliminate racial inequities in classroom outcomes for students from historically racially marginalized communities.

Recommendations for Future Practice

Findings from this study suggest that eliminating racial inequities in CCC classroom outcomes for students from historically racially marginalized communities requires an intentional focus on classroom instruction and the use of racially disaggregated course-level data to offer a robust programmatic professional development program for instructional faculty. This program would focus on CRT approaches to interrogate positionality; perception; the academy's color-blind, race-neutral, meritocratic teaching; and the effects of Whiteness in the classroom and curriculum. Future practice should also include adjusting equity work on CCC campuses to include a healthy focus on instruction rather than just student services. While all areas of student services have an important role to play in supporting student success, students spend the vast majority of their time at a CCC in the classroom. Therefore, it is important to re-envision professional development offerings for instructional faculty to create more long-term offerings such as the EMTLI.

Conclusion

California Community Colleges remain the largest and most accessible bridge to higher education and career training for historically racially marginalized communities. As such, it is imperative that we continue to seek ways to reinforce and widen this CCC bridge via inclusive and validating experiences for students from historically racially marginalized communities that result in equitable classroom outcomes. This study offers insight and a way forward in helping CCCs address existing racial inequities in classroom outcomes via the Equity-Minded Teaching and Learning Institute. EMTLI offers answers to racial inequities in classroom outcomes by focusing on the instructor rather than the

student, the history of race and racism in education, using racially disaggregated courselevel data, and purposely employing approaches based on critical race theory. These CRT approaches are focused on teaching as it affects competence and practice (Gay); pedagogy as it affects attitude and disposition (Ladson-Billings); and perceptions of students as they affect how faculty see, expect, and interpret what students from historically racially marginalized communities bring with them into the classrooms (Yosso). EMTLI is a space for genuine social change, because all these CRT approaches have a firm commitment to social justice education and see the classroom as a site for social change. While all areas of student services have an important role to play in supporting student success, students spend the vast majority of their time while at a CCC in the classroom. That is where we should focus to remedy racial disparities in classroom outcomes.

The topic of this study, equity-minded teacher preparation in the CCC, was of great interest to me based on my own history as a low-income first-generation Mexican American CCC student who earned tenure as a CCC faculty member and later became a CCC administrator. While this study has already influenced how I see and go about my administrative role overseeing student equity, it will also continue to inform my work moving forward regardless of the administrative position I hold. Also informing my practice and this study was spending the first 10 years of my career as a faculty member within the division of student services in the CCC, buying into the false narrative that I could help address racial achievement gaps in classroom outcomes for students from historically racially marginalized communities by simply developing and implementing cohort-based student support programs. In the process of my many failures, I gained the

much-needed insight that would bring EMTLI and this study to existence. These experiences and my current doctoral studies have completely shifted my perspective on how to approach the work of eliminating racial disparities in classroom outcomes for students from historically racially marginalized communities. I understand the issues of race, racism, Whiteness, and White supremacy in education from a completely different lens because of my increased depth in knowledge about literacy, critical race theory, research methods, and all that makes up equity-minded teaching and learning.

REFERENCES

Academic Senate for California Community Colleges. (2020a). 50th anniversary.

https://asccc.org/50th-anniversary

Academic Senate for California Community Colleges. (2020b). About bylaws.

https://www.asccc.org/about/bylaws

- Academic Senate for California Community Colleges. (2020c). *Faculty development: A senate issue*. <u>https://www.asccc.org/papers/faculty-development-senate-issue</u>
- Academic Senate for California Community Colleges. (2020d). *Local senates handbook*. <u>https://www.asccc.org/papers/handbook2015</u>
- Aronson, B., & Laughter, J. (2016). The theory and practice of culturally relevant education: A synthesis of research across content areas. *Review of Educational Research*, 86(1), 163–206.
- Bensimon, E. M. (2018). Reclaiming racial justice in equity. *Change: The Magazine of Higher Learning*, *50*(3–4), 95–98.
- Bensimon, E. M., & Gray, J. (2020). First-generation equity practitioners: Are they part of the problem? *Change: The Magazine of Higher Learning*, *52*(2), 69–73.
- Biggs, B. A., Bowers, E., & Bartle Angus, K. (2018). University and community college partnership: Building teaching capacity to increase underserved student success. *Journal of College Reading and Learning*, 48(3), 145–158.
- Boggs, G. R., & Cater, J. J. (1994). The historical development of academic programs in community colleges. In G.A. Baker (Ed.), *A handbook on the community college in America: Its history, mission, and management* (pp. 218–226). Greenwood Press.

- Bourdieu, P., & Passeron, J. C. (1977). *Education, society and culture* (R. Nice, Trans.). SAGE Publications.
- Bragg, D. D., & Durham, B. (2012). Perspectives on access and equity in the era of (community) college completion. *Community College Review*, 40(2), 106–125. <u>https://doi.org/10.1177/0091552112444724</u>
- Brown, T., & Katz, B. (2011). Change by design. *Journal of Product Innovation Management*, 28(3), 381–383.
- Bustillos, L. T., & Siqueiros, M. (2018). Left out: How exclusion in California's colleges and universities hurts our values, our students, and our economy. Campaign for College Opportunity.

https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:050565f2-1ce9-485c-af4f-ec18cdfc8046

California Community Colleges Chancellor's Office. (2013). Data mart.

https://datamart.cccco.edu/Faculty-Staff/Staff Demo.aspx

California Community Colleges Chancellor's Office. (2020). Key facts.

http://californiacommunitycolleges.cccco.edu/PolicyInAction/KeyFacts.aspx

California Legislative Information. (1997). California law.

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=ED

C§ionNum=66010.4.

California Legislative Information. (2020). AB-943 Community colleges: Student equity and achievement program funds.

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200A B943

- Callan, P. M. (2009). California higher education, the master plan, and the erosion of college opportunity (National Center Report #09-1). National Center for Public Policy and Higher Education.
- CalPassPlus. (n.d.). Launch board student success metrics.

https://www.calpassplus.org/LaunchBoard/Student-Success-Metrics

- Center for Urban Education. (2019). *Five principles for creating equity by design*. University of Southern California, Rossier School of Education.
- Cepeda, R. (1991). *Flexible calendar: Evaluation and Title 5 revisions*. Board of Governors California Community Colleges
- Closson, R. B. (2010). Critical race theory and adult education. *Adult Education Quarterly*, 60(3), 261–283.
- Community College League of California. (2019). *The origin of California's community colleges*. <u>https://www.ccleague.org/blog/origin-californias-community-colleges</u>
- Conn, E. (1997). *A brief history of the academic senate for California community colleges.* Academic Senate for Community Colleges.
- Connell, J. M. (2001). Restoring aesthetic experiences in the school curriculum: The legacy of Rosenblatt's transactional theory from literature as exploration. *The Journal of Educational Foundations, 15*(1), 39–56.

Crenshaw, K. W. (2017). On intersectionality: Essential writings. The New Press.

- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE Publications.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.

Douglass, J. A. (2010). FROM CHAOS TO ORDER AND BACK? A Revisionist Reflection on the California Master Plan for Higher Education@50 and Thoughts About its Future. *UC Berkeley: Center for Studies in Higher Education*. Retrieved from https://escholarship.org/uc/item/6q49t0hj

Freire, P. (2018). Pedagogy of the oppressed. Bloomsbury Publishing USA.

- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53(2), 106–116.
- Gay, G. (2010). Acting on beliefs in teacher education for cultural diversity. *Journal of Teacher Education*, *61*(1-2), 143–152.
- Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum Inquiry*, *43*(1), 48–70.
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.
- Guaracha, A. D., Jr. (2017). The factors affecting anticipated persistence for community college men of Mexican descent [Unpublished doctoral dissertation]. San Diego State University.
- Harris, F., III, & Wood, J. L. (2014). Examining the status of men of color in California community colleges: Recommendations for state policymakers. Minority Male Community College Collaborative.
- Howard, T. C., & Navarro, O. (2016). Critical race theory 20 years later: Where do we go from here? *Urban Education*, *51*(3), 253–273.
- Juettner, V. (2003). Culturally responsive schools: Leadership, language, and literacy development. *Talking Points*, *14*(2), 11–16.

- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, *6*(5), 26–41.
- Kromka, S. M., Goodboy, A. K., & Banks, J. (2020). Teaching with relevant (and irrelevant) storytelling in the college classroom. *Communication Education*, 69(2), 224–249.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491.
- Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, *11*(1), 7–24.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: AKA the remix. *Harvard Educational Review*, 84(1), 74–84.
- Ladson-Billings, G. (2016). And then there is this thing called the curriculum: Organization, imagination, and mind. *Educational Researcher*, 45(2), 100–104.
- Ladson-Billings, G. (2018). The social funding of race: The role of schooling. *Peabody Journal of Education*, 93(1), 90–105.
- Ladson-Billings, G., & Tate, W. F. (2000). Toward a critical race theory of education. Sociology of Education: Major Themes, edited by Stephen Ball, 322-342.
- Ledesma, M. C., & Calderón, D. (2015). Critical race theory in education: A review of past literature and a look to the future. *Qualitative Inquiry*, *21*(3), 206–222.
- Livingston, T. (1998). *History of California's AB 1725 and its major provisions*. ERIC® Clearinghouse for Community Colleges

- Locke, K. M. (2004). A study of the implementation of the shared governance provisions of AB 1725 in the California community colleges [Unpublished doctoral dissertation]. Golden Gate University.
- Luna, M. S. (2016). (Re)defining "good teaching": Teacher performance assessments and critical race theory in early childhood teacher education. *Contemporary Issues in Early Childhood*, 17(4), 442–446. <u>https://doi.org/10.1177/1463949116677932</u>
- Luna, N. A., & Martinez, M. (2013). A qualitative study using community cultural wealth to understand the educational experiences of Latino college students. *Journal of Praxis in Multicultural Education*, 7(1). <u>https://doi.org/10.9741/2161-2978.1045</u>
- Macedo, D. (2006). *Literacies of power: What Americans are not allowed to know*. Westview Press.
- Martin, J. (2013) Critical race theory, hip hop, and Huck Finn: Narrative inquiry in a high school English classroom. *The Urban Review*, 46(2), 244–267.
 https://doi.org/10.1007/s11256-013-0250-9
- Morrison, K. A., Robbins, H. H., & Rose, D. G. (2008). Operationalizing culturally relevant pedagogy: A synthesis of classroom-based research. *Equity & Excellence in Education*, 41(4), 433–452.
- Palkki, J. (2015). "If it fits into their culture, then they will have a connection":
 Experiences of two Latina students in a select high school choir. *Research & Issues in Music Education, 12*(1).
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93–97.

- Patton, L. D. (2015) Disrupting postsecondary prose: Toward a critical race theory of higher education. Urban Education, 51(3), 315–342.
- Powers, J. M. (2007). The relevance of critical race theory to educational theory and practice. *Journal of Philosophy of Education*, *41*(1), 151–166.
- Rivera-Lacey, S. (2016). At the crossroads of aspiration and achievement: Examining the educational and counseling experiences of low-income, first-generation Latino/a community college students [Unpublished doctoral dissertation]. San Diego State University.
- Roen, D., & Karolides, N. J. (2005). Louise Rosenblatt: A life in literacy. *ALAN Review*, 32(3), 59–61.
- Rowe, P. G. (1987). Design thinking. MIT Press.
- Sheehan, M. (1994). *Minimum qualifications for faculty and administrators in California community colleges*. Chancellor's Office California Community Colleges.
- Sleeter, C. E. (2017). Critical race theory and the Whiteness of teacher education. *Urban Education, 52(2)*, 155-169.
- Smith, D. R., & Ayers, D. F. (2006). Culturally responsive pedagogy and online learning: Implications for the globalized community college. *Community College Journal* of Research and Practice, 30(5-6), 401–415.
- Solórzano, D. G., & Yosso, T. J. (2002). Critical race methodology: Counter-storytelling as an analytical framework for education research. *Qualitative Inquiry*, 8(1), 23–44.
- Trust-West, E. (2017). The majority report: Supporting the success of Latino students in California.

https://west.edtrust.org/wpcontent/uploads/sites/3/2017/11/ETW_TMR_FINAL.p df

- Wells, R. (2008). The effects of social and cultural capital on student persistence: Are community colleges more meritocratic? *Community College Review*, 36(1), 25–46.
- Woodyard, L., & Levy, R. (2018). *Minimum qualifications for faculty and administrators in California community colleges.*

https://asccc.org/sites/default/files/Minimum_Qualifications2018.pdf

- Yosso, T. J. (2002). Toward a critical race curriculum. *Equity & Excellence in Education*, 35(2), 93–107. <u>https://doi.org/10.1080/713845283</u>
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, 8(1), 69–91.
- Yosso, T. J., Parker, L., Solórzano, D. G., & Lynn, M. (2004). From Jim Crow to affirmative action and back again: A critical race discussion of racialized rationales and access to higher education. *Review of Research in Education*, 28(1), 1–25.
- Yosso, T. J., & Solórzano, D. G. (2006). *Leaks in the Chicana and Chicano educational pipeline* (Latino Policy & Issues Brief No. 13). UCLA Chicano Studies Research Center.
- Zapata, I. (2019). Funds of teaching identity: Teaching and learning in California community colleges [Unpublished doctoral dissertation]. University of California, Los Angeles.

APPENDIX A

St. John's University IRB Approval



Federal Wide Assurance: FWA00009066

Jul 6, 2020 11:59 AM EDT

PI: Jesus Miranda CO-PI: Aly McDowell Dept: Education Specialties

Re: Initial - IRB-FY2021-13 Examining Equity-Minded Teacher Preparation in the California Community College

Dear Jesus Miranda:

The St John's University Institutional Review Board has rendered the decision below for Examining Equity-Minded Teacher Preparation in the California Community College.

Decision: Exempt

PLEASE NOTE: If you have collected any data prior to this approval date, the data must be discarded.

Selected Category: Category 4. Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

(i) The identifiable private information or identifiable biospecimens are publicly available;

(ii) Information, which may include information about biospecimens, is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify subjects;

(iii) The research involves only information collection and analysis involving the investigator's use of identifiable health information when that use is regulated under 45 CFR parts 160 and 164, subparts A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as described under 45 CFR 164.512(b); or

(iv) The research is conducted by, or on behalf of, a Federal department or agency using government-generated or government-collected information obtained for nonresearch activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U.S.C. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq.

Sincerely,

Raymond DiGiuseppe, PhD, ABPP Chair, Institutional Review Board Professor of Psychology

Marie Nitopi, Ed.D. IRB Coordinator

APPENDIX B

Participant Recruitment Email

Email:

Dear [faculty name],

Based on your successful completion of the Equity-Minded Teaching and Learning Institute (EMTLI) at Cuyamaca College, you are cordially invited to participate in a study examining the effects of EMTLI via a 60-minute interview on Zoom. Your participation in this study will help me examine the effects on faculty who successfully complete the EMTLI.

If you agree to participate in this study, please review and sign the attached Faculty Participant Informed Consent Form and return it to me at your convenance. Once I have your signed consent form, I will schedule with you an individual Zoom interview session, based on your availability, which will last no more than 60 minutes.

This interview and study will be conducted by Jesus Miranda, Department of Education Specialties, St. John's University, as part of his doctoral dissertation work.

Sincerely,

Jesus Miranda

APPENDIX C

Faculty Participant Informed Consent Form



Dear Participant:

Based on your successful completion of the Equity-Minded Teaching and Learning Institute (EMTLI) at Cuyamaca College, you have been selected to participate in a study about the effect of EMTLI on improving pedagogical and teaching practice, along with perceptions of students from historically racially marginalized communities in the United States. This study will be conducted by Jesus Miranda, Department of Education Specialties, St. John's University, as part of his doctoral dissertation work. His faculty sponsor is Dr. Alyssa McDowell, Department of Education Specialties.

If you agree to participate in this study, you will take part in an individual interview. The study is anticipated to be one interview session lasting a minimum of 60 minutes. All interview sessions will be done via Zoom, recorded, and transcribed. The recordings and transcriptions will be kept in an encrypted file and destroyed after the study is complete. There are no known risks associated with your participation in this research beyond those of everyday life.

Federal regulations require that all subjects be informed of the availability of medical treatment or financial compensation in the event of physical injury resulting from participation in the research. St. John's University cannot provide either medical treatment or financial compensation for any physical injury resulting from your participation in this research project. Inquiries regarding this policy may be made to the principal investigator or the Human Subjects Review Board (718-990-1440).

Although you will receive no direct benefits, this research may help the investigator understand the effects of the EMTLI and may help identify an effective method to eliminate disparities in classroom outcomes for students from historically racially marginalized communities attending California Community Colleges.

Confidentiality of your records will be strictly maintained by removing your name and any identifiers will be replaced with a letter. Consent forms will be stored in a separate location from the interview documentation and will be stored in a locked file. Your responses will be kept confidential with the following exception: the researcher is required by law to report to the appropriate authorities if there is suspicion of harm to yourself, to children, or to others. Your responses will be kept confidential by the researcher. Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty.

If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions, or if you wish to report a research-related problem, you may contact Jesus Miranda, jesus.miranda18@stjohns.edu, St. John's University, 8000 Utopia Parkway, Queens NY, 11439 or the faculty sponsor, Dr. Alyssa McDowell, at mcdowela@stjohns.edu, St. John's University, Sullivan Hall 4th Floor, 8000 Utopia Parkway, Queens NY, 11439.

For questions about your rights as a research participant, you may contact the St. John's University Institutional Review Board, Dr. Raymond DiGiuseppe, Chair, <u>digiuser@stjohns.edu</u>, 718-990-1955 or Marie Nitopi, IRB Coordinator, <u>nitopim@stjohns.edu</u>, 718-990-1440.

You have received a copy of this consent document to keep.

Agreement to Participate

Yes, I agree to participate in the study described above.

Participant's Signature

Date

APPENDIX D

EMTLI Presurvey



Equity-Minded Teaching and Learning Institute Pre-Survey

Thank you for participating in our Equity-Minded Teaching and Learning Institute. Please take a moment to complete this brief survey to help us better understand the practices you use in your classrooms. Your responses are confidential.

How often do you do each of the following in your course(s)?

	Never	Sometimes	Often	Always
Develop personal relationships with students by learning about their academic goals	0	0	0	0
Contact students who stop attending	0	0	0	0
Contact students whose grades suddenly drop	0	0	0	0
Communicate high expectations of students regarding their intellectual capability to succeed in college	0	0	0	0
Provide students with feedback on assignments before they submit those assignments for grades	0	0	0	0
Refer students to on-campus support services when they are struggling	0	0	0	0
Communicate to students that their perspectives are valued in class	0	0	0	0
Challenge students to apply what they learn in class to their daily lives	0	0	0	0
Use examples that are relevant to the daily lives of students with diverse backgrounds and experiences	0	0	0	0

Please provide at least one question you have about **equity-mindedness** that you would like answered during the Institute:

Institutional Effectiveness, Success, and Equity Office

APPENDIX E

EMTLI Postsurvey

CUYAMACA CUYAMACA COLLEGE. Equity-minded Teaching and Learning Institute (EMTLI) Post Survey: 2019-2020				
(EMTLI). Please ta your experience wi		-		tter understand
 Your experience with the EMTLI. Your responses are confidential. Please rate how much participating in the EMTLI improved your ability to do the following: 				
	Did not improve at all	Improved very little	Improved somewhat	Improved a lot
Analyze data to identify opportunities to improve my teaching practices	0	0	•	0
Analyze the impact institutional racism has on higher education	0	0	\circ	0
Analyze the impact meritocracy has on higher education	0	0	0	0
Reflect on the reasons I teach at a community college (my "why')	0	0	\circ	0
Reflect on the assets my students bring to my classroom	0	0	0	0
Build meaningful relationships with students	0	0	0	0

. Please rate how mu	ch participating in the	,,	ability to do the follow	
	Did not improve at all	Improved very little	Improved somewhat	improved a lot
Reflect on culturally responsive teaching and learning (CRTL) strategies	0	0	0	0
Create equity-minded course materials and artifacts (e.g., syllabi, assessments, grading techniques)	0	0	0	0
Understand community cultural wealth	0	0	0	0
Learn about my students' community cultural wealth	0	0	0	0
Incorporate my students' community cultural wealth in my classes	0	0	•	0
	ence/activity impacted	TLI?	nally?	
			nally?	
. What EMTLI experie		you the most emotion	nally?	
. What EMTLI experie 5. Please rate your I would encourage	agreement with the fo	l you the most emotion pllowing statement: rticipate in the EMTLI		
. What EMTLI experie 5. Please rate your	agreement with the fo	l you the most emotion pllowing statement: rticipate in the EMTLI		
. What EMTLI experie 5. Please rate your I would encourage Strongly disagree	agreement with the fo	I you the most emotion ollowing statement: Inticipate in the EMTLI		
. What EMTLI experie 5. Please rate your I would encourage Strongly disagree	agreement with the fo other instructors to pa Disagree Agree	I you the most emotion ollowing statement: Inticipate in the EMTLI		
. What EMTLI experie 5. Please rate your I would encourage Strongly disagree	agreement with the fo other instructors to pa Disagree Agree	I you the most emotion ollowing statement: Inticipate in the EMTLI		

7. How often do you plan to do each of the following in your course(s) next semester?				
	Never	Sometimes	Often	Always
Develop personal relationships with students by learning about their academic goals	0	0	0	0
Contact students who stop attending	\bigcirc	0	0	0
Contact students whose grades suddenly drop	0	0	0	0
Communicate high expectations of students regarding their intellectual capability to succeed in college	0	0	0	0
Provide students with feedback on assignments before they submit those assignments for grades	0	0	0	0
Refer students to on- campus support services when they are struggling	0	0	0	0
Communicate to students that their perspectives are valued in class	0	0	0	0
Challenge students to apply what they learn in class to their daily lives	0	0	0	0
Use examples that are relevant to the daily lives of students with diverse backgrounds and experiences	0	0	0	0

	Equity-minded Ter Po	aching and Learning ost Survey: 2019-20	g Institute (EMTLI) 20	
. Please rate how imp articipate in this instit		llowing aspects of the	EMTLI was in your orig	inal decision to
	Not important at all	Somewhat important	Moderately important	Very important
Collaboration with other aculty members	0	0	0	0
Analyzing practitioner- evel data	0	0	0	0
Learning about equity- minded practices	0	0	\odot	0
Compensation for attending sessions	0	0	0	0
Receiving a certificate upon completion	0	0	0	0
Diana antida atra			ninger of the EMPERIO	
Please provide sug	Jesuons about now w	e can improve the exp	erience of the EMTLI for	or luture participan

APPENDIX F

Interview Questions



Dear Participant:

Thank you for participating in this study, via Zoom, to further examine the Equity-Minded Teaching and Learning Institute (EMTLI) at Cuyamaca College. You should have a copy of your signed Participant Informed Consent Form.

We have the next 60 minutes to go over eight questions. At any time, please feel free to ask for clarification. Just a reminder: this interview is being recorded.

- 1. What motivated you to participate in the EMTLI?
- 2. Prior to the EMTLI, how would you describe your perceptions of students from

historically racially marginalized communities, including Black or African

American, Latino or Mexican American, Native American or Alaskan Native,

Hawaiian or Pacific Islander, and Filipino?

- 3. After the EMTLI, how would you describe your perceptions of students from historically racially marginalized communities?
- 4. How did the EMTLI impact your perceptions of students from historically racially marginalized communities?

Probe/follow-up: Could you provide an example of how this impacted your perceptions?

- 5. How did the EMTLI impact your teaching philosophy?
- 6. How did the EMTLI impact your policies and practices?

7. Do you feel the EMTLI is an effective program of professional development? Why or why not?

8. Is there anything you would like to add about your experience in the EMTLI? Thank you for participating in this study and enjoy the rest of your day.

Sincerely,

Jesus Miranda

APPENDIX G

EMTLI Sessions and Teacher Learning Outcomes (TLOs)

Semester 1 sessions: Focused on inquiry and self-reflection.

 Welcome, cohort team building, and introduction to EMTLI process and content; faculty receive and reflect on campus- and department-level data as well as their individual, disaggregated campus- and course-level data.

TLO: Use data to identify strengths and weaknesses in their own teaching practice, better understand their equity data stories.

 Part 1 of our in-depth look at the history of institutionalized racism in the United States and in higher education, the culture of whiteness, the system of meritocracy, our interconnectedness as people, and how we can create positive changes in our classrooms by starting with our own self-change.

TLO: Understand the history of race and racism, the culture of whiteness, specifically its impact on higher education and classroom culture.

3. Part-2 of the in-depth look at the history of institutionalized racism, looking at the contemporary local context, followed by an exploration of how we can build stronger relationships with our students and thereby disrupt the inequitable routines and structures that inhibit student and instructor success.

TLO: Understand of the history of race and racism, specifically its impact on higher education and classroom culture.

Equity-minded teaching and learning in practice, humanizing teaching in the 21st century.

- **TLO**: Identify what each individual sees as the purpose of teaching in the community college. Understand ways to implement multiple teaching approaches via technology to humanize the classroom.
- 5. Equity-minded teaching and learning in practice, shifting the power dynamic and culturally connecting content.

TLO: Identify effective strategies to infuse an equity-minded teaching and learning framework in college courses and understand the power dynamics in college courses.

- Review of local student demographics, discussion of deficit-mindedness vs. assetmindedness, implementing community cultural wealth teaching and learning strategies, and reflection.
 - **TLO**: Gain awareness of how to use the community cultural wealth model to validate students' identities and culture, engage students in their academic work, and recognize student capacity.
- 7. Transforming syllabi to reflect a more equity-minded approach and identifying core disciplinary ideas for implementation, identifying, and incorporating equity-minded grading techniques and assessment of assignments.
 - **TLO**: Understand key components of equity-minded syllabi, assignments, and grading and assessment techniques.
- Review of local staff demographics, discussion of meritocracy (deficitmindedness vs. asset-mindedness) and implementing community cultural wealth teaching and learning strategies, and reflection.

TLO: Identify classroom and curricular changes using equity-minded approaches and assess interventions to engage in a cycle of continuous improvement.

Semester 2 sessions: Focused on implementation based on inquiry and self-reflection.

- 9. Further explore community cultural wealth strategies and how they can be implemented to create desired classroom culture.
 - **TLO**: Understand and apply community cultural wealth definitions, identify strategies to use in creating an ideal classroom culture, and how or when to implement them.
- 10. Community cultural wealth and the classroom culture continued.
 - **TLO**: Analyze and evaluate one's ideal classroom culture and use the community cultural wealth model to develop strategies to achieve this culture with students.
- Effective, equity-minded strategies for remote instruction and distance education.
 TLO: *Identify effective, equity-minded approaches for teaching and learning in a remote setting.*
- 12. Sharing power with our students to create community and an inclusive classroom setting where students have a voice.
 - *TLO*: Analyze classroom power dynamics and develop strategies to reduce power differences between the instructor and students.
- 13. Introduce equity-minded project-based learning (PBL) to enhance student engagement.
 - **TLO**: Understand the components of equity-minded PBL and develop an equityminded PBL assignment for one's discipline.

- 14. Presentation by EMTLI participants showcasing equity-minded changes in teaching pedagogy and practice they have implemented or plan to implement.
 - **TLO**: Demonstrate equity-minded changes made in courses and practice, adapt and apply ideas from other EMTLI participants' presentations

VITA

Name	Jesus Miranda
Baccalaureate Degree	Bachelor of Arts University of California Riverside Riverside, California Major: Latin American Studies
Date Graduated	March, 2001
Other Degrees and Certificates	Master of Arts in Education San Diego State University San Diego, California Major: Multicultural Counseling (CBB) Completed Requirements: May, 2004 Master of Science, San Diego State University, San Diego, California Major: Counseling
Date Graduated	December, 2006